INDEX OF PATENTS

RELATING TO

ELECTRICITY,

EMBRACING PATENTS ISSUED BY

THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1888, TO JUNE 30, 1889.

APPENDIX No. VIII.

COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.

282517

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1890.

INDEX OF PATENTS

RELATING TO

ELECTRICITY,

EMBRACING PATENTS ISSUED BY

THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1888, TO JUNE 30, 1889.

APPENDIX No. VIII.

COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1890.

ERRATA.

No. 397,049, Cade, B., Railway signals, should read Telegraphy, railway-car, in alphabetical and numerical indexes.

Nos. 388,481 and 389,062, Delany, P. B., Telephones, circuits and systems, should read Telegraphy, circuits and systems, in alphabetical index.

No. 387,265, Stuckert, J. F., Alarms, fire, should read Telegraphy, fire, alarms and extinguishers, in alphabetical and numerical indexes.

No. 400,658, Gennert, E. F., Gas settings, should read Gas fittings, in alphabetical and numerical indexes.

APPENDIX No. VIII.

PART I.

CONSISTING OF A

SUB-CLASS INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1888, to June 30, 1889, inclusive, giving names of Inventors,
and dates and numbers of Patents in each sub-class in
numerical and chronological order.

CLASSIFIED INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1888, TO JUNE 30, 1889.

171. GENERATION.—6. BATTERIES—GALVANIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
385,344	Eaton, A. K. -----	July 3, 1888	395,028	Bailey, M. and Warner, J. -----	Dec. 25, 1888
385,760	Kookogey, W. P. -----	July 10, 1888	395,706	Kitsee, I. -----	Jan. 8, 1889
386,090	Roberts, I. L. -----	July 10, 1888	395,769	Coad, T. -----	Jan. 8, 1889
386,149	Meserole, A. V. -----	July 17, 1888	395,835	Kookogey, W. P. -----	Jan. 8, 1889
386,150	Meserole, A. V. -----	July 17, 1888	395,837	Kookogey, W. P. -----	Jan. 8, 1889
386,569	Wheelock, B. J. and J. W. -----	July 24, 1888	396,329	D'Humy, P. R. De F. -----	Jan. 15, 1889
387,049	Carr, R. L. and Borden, P. -----	July 31, 1888	396,342	Scheithauer, B. -----	Jan. 15, 1889
387,642	Hewett, E. M. -----	Aug. 14, 1888	396,870	Heinrichs, C. F. -----	Jan. 29, 1889
387,643	Hewett, E. M. -----	Aug. 14, 1888	396,871	Heinrichs, C. F. -----	Jan. 29, 1889
387,654	Overlack, B. -----	Aug. 14, 1888	397,111	Colby, E. J. -----	Feb. 5, 1889
387,839	Woods, G. T. -----	Aug. 14, 1888	397,116	Egan, C. E. -----	Feb. 5, 1889
388,181	Cassard, H. -----	Aug. 21, 1888	397,489	Clamer, F. J. and Hendrickson, J. G. -----	Feb. 12, 1889
388,812	Scarles, B. -----	Aug. 21, 1888			
388,430	Meserole, A. V. -----	Aug. 28, 1888	397,526	Thompson, C. M. -----	Feb. 12, 1889
388,628	Carr, R. L. and Borden, P. -----	Aug. 28, 1888	397,945	Sperry, E. A. -----	Feb. 19, 1889
389,140	Eaton, A. K. -----	Sept. 4, 1888	397,969	Cross, E. D. -----	Feb. 19, 1889
389,532	Serson, J. -----	Sept. 11, 1888	398,132	Cross, E. D. -----	Feb. 19, 1889
389,676	Trippe, S. L. -----	Sept. 18, 1888	398,737	Kookogey, W. P. -----	Feb. 26, 1889
390,597	Hewett, E. M. -----	Oct. 2, 1888	400,088	Kammeyer, C. E. K. -----	Mar. 26, 1889
390,674	Humphreys, D. -----	Oct. 9, 1888	400,126	Shaw, F. -----	Mar. 26, 1889
390,675	Humphreys, D. -----	Oct. 9, 1888	400,215	Imschenetzky, A. -----	Mar. 26, 1889
390,676	Humphreys, D. -----	Oct. 9, 1888	400,224	Kitsee, I. -----	Mar. 26, 1889
390,677	Humphreys, D. -----	Oct. 9, 1888	400,225	Kitsee, I. -----	Mar. 26, 1889
390,748	Brewer, H. J. -----	Oct. 9, 1888	400,227	Kitsee, I. -----	Mar. 26, 1889
391,505	Brewer, H. J. -----	Oct. 23, 1888	400,430	Crosby, E. H. -----	Apr. 2, 1889
392,336	Wallace, J. B. -----	Nov. 13, 1888	401,059	Phalan, J. H. -----	Apr. 9, 1889
393,123	Root, F. H. -----	Nov. 20, 1888	402,104	Pratt, R. J. -----	Apr. 23, 1889
393,203	Bartley, L. C. -----	Nov. 20, 1888	402,166	Kookogey, W. P. -----	Apr. 30, 1889
393,553	Brewer, H. J. -----	Nov. 27, 1888	402,915	Friedländer, A. -----	May 7, 1889
393,595	Roosevelt, H. L. -----	Nov. 27, 1888	403,253	Collé, C. -----	May 14, 1889
393,639	Gethins, J. L. -----	Nov. 27, 1888	403,451	Barrett, J. A. -----	May 14, 1889
394,296	Rand, E. R. -----	Dec. 11, 1888	403,802	Vetter, J. C. -----	May 21, 1889
394,613	Roberts, I. L. -----	Dec. 18, 1888	403,868	Arnold, D. J. -----	May 21, 1889
394,614	Roberts, I. L. and Brevoort, H. L. -----	Dec. 18, 1888	403,955	Noble, C. B. -----	May 28, 1889
394,615	Roberts, I. L. -----	Dec. 18, 1888	404,698	Frishmuth, W. -----	June 4, 1889
394,616	Roberts, I. L. -----	Dec. 18, 1888	404,699	Frishmuth, W. -----	June 4, 1889
394,617	Roberts, I. L. -----	Dec. 18, 1888	405,196	Barrett, J. A. -----	June 11, 1889
394,638	Brevoort, H. L. and Roberts, I. L. -----	Dec. 18, 1888	405,246	Childs, W. A. -----	June 18, 1889
394,670	Wright, R. D. -----	Dec. 18, 1888	405,609	Serson, J. -----	June 18, 1889
394,810	Beattie, J., jr -----	Dec. 18, 1888			

171. GENERATION.—72. BATTERIES—SECONDARY.

385,390	Trippe, S. L. -----	July 3, 1888	392,244	Walter, H. -----	Nov. 6, 1888
385,558	King, F. -----	July 3, 1888	392,573	Thompson, C. H. -----	Nov. 6, 1888
386,530	Enos, J. A. -----	July 24, 1888	392,574	Thompson, C. H. -----	Nov. 6, 1888
386,893	Sellon, J. S. -----	July 31, 1888	392,826	Sellon, J. S. -----	Nov. 13, 1888
387,679	Fitch, D. H. -----	Aug. 14, 1888	393,573	Paget, L. -----	Nov. 27, 1888
388,335	Beattie, J., jr -----	Aug. 21, 1888	393,575	Paget, L. -----	Nov. 27, 1888
388,601	Trippe, S. L. -----	Aug. 28, 1888	393,576	Paget, L. -----	Nov. 27, 1888
388,668	Gibson, C. D. P. -----	Aug. 28, 1888	393,577	Paget, L. -----	Nov. 27, 1888
388,746	Van Gestel, J. T. -----	Aug. 28, 1888	393,814	Burns, P. C. -----	Dec. 4, 1888
389,186	Askew, C. B. and Pumpelly, J. K. -----	Sept. 11, 1888	393,954	Woodward, H. -----	Dec. 4, 1888
389,455	Elliott, R. M. -----	Sept. 11, 1888	393,955	Woodward, H. -----	Dec. 4, 1888
389,882	Fanre, C. A. -----	Sept. 25, 1888	394,471	Duncan, L. -----	Dec. 11, 1888
391,229	Butler, II. W. -----	Oct. 16, 1888	394,472	Duncan, L. -----	Dec. 11, 1888
392,930	Stout, G. II -----	Oct. 30, 1888	394,473	Duncan, L. -----	Dec. 11, 1888

171. GENERATION.—72. BATTERIES—SECONDARY—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
394,474	Duncan, L.-----	Dec. 11, 1888	399,535	Huber, J. L.-----	Mar. 12, 1889
394,897	Wiegand, H. H.-----	Dec. 18, 1888	400,226	Kitsee, I.-----	Mar. 26, 1889
395,311	Cameron, H. F. De B.-----	Jan. 1, 1889	400,404	Hunter, R. M.-----	Mar. 26, 1889
396,367	Roberts, I. L.-----	Jan. 15, 1889	400,842	Griscom, W. W.-----	Apr. 2, 1889
396,368	Roberts, I. L.-----	Jan. 15, 1889	400,843	Griscom, W. W.-----	Apr. 2, 1889
396,369	Roberts, I. L.-----	Jan. 15, 1889	401,289	Main, W.-----	Apr. 9, 1889
396,769	Sellon, J. S.-----	Jan. 29, 1889	401,290	Main, W.-----	Apr. 9, 1889
396,770	Sellon, J. S.-----	Jan. 29, 1889	401,291	Main, W.-----	Apr. 9, 1889
396,958	Sellon, J. S.-----	Jan. 29, 1889	401,466	Sellon, J. S.-----	Apr. 16, 1889
397,235	Hunter, R. M.-----	Feb. 5, 1889	401,744	Griscom, W. W.-----	Apr. 23, 1889
397,443	Shaw, W. A.-----	Feb. 5, 1889	401,953	Kookogey, W. P.-----	Apr. 23, 1889
397,557	Knowles, E. R.-----	Feb. 12, 1889	402,006	Desmazures, C.-----	Apr. 23, 1889
397,607	Paget, L.-----	Feb. 12, 1889	402,484	Schoop, P.-----	Apr. 30, 1889
397,608	Paget, L.-----	Feb. 12, 1889	402,586	Griscom, W. W.-----	May 7, 1889
397,650	Kingsland, W.-----	Feb. 12, 1889	403,177	Buell, C. E.-----	May 14, 1889
397,796	Gibson, C. D. P.-----	Feb. 12, 1889	403,593	Jamieson, A.-----	May 21, 1889
397,965	Burnley, W.-----	Feb. 19, 1889	403,957	Price, J. B.-----	May 28, 1889
398,075	Pedersen, J. T.-----	Feb. 19, 1889	404,168	Cameron, H. F. De B. and Har- ris, T.-----	May 28, 1889
398,194	Timmis, I. A.-----	Feb. 19, 1889			
398,409	Lang, E. M.-----	Feb. 26, 1889	405,213	Hicks, T. H.-----	June 11, 1889
399,052	Knowles, E. R.-----	Mar. 5, 1889	405,751	Van Gestel, J. T.-----	June 25, 1889
399,274	Meserole, A. V.-----	Mar. 12, 1889			

171. GENERATION.—74. BATTERIES—SECONDARY—APPLICATIONS.

386,225	Walker, G. W.-----	July 17, 1888	395,377	Brush, C. F.-----	Jan. 1, 1889
387,988	Pfatscher, M.-----	Aug. 14, 1888	395,378	Brush, C. F.-----	Jan. 1, 1889
389,356	Bickley, C. G.-----	Sept. 11, 1888	395,379	Brush, C. F.-----	Jan. 1, 1889
389,638	Conant, T. P.-----	Sept. 18, 1888	395,836	Kookogey, W. P.-----	Jan. 8, 1889
389,935	McDonald, W. H.-----	Sept. 25, 1888	396,213	Lugo, O.-----	Jan. 15, 1889
390,463	Edmunds, H.-----	Oct. 2, 1888	396,214	Lugo, O.-----	Jan. 15, 1889
390,464	Edmunds, H.-----	Oct. 2, 1888	396,681	Brush, C. F.-----	Jan. 22, 1889
391,468	Griscom, W. W.-----	Oct. 23, 1888	399,755	King, F.-----	Mar. 19, 1889
393,146	Edmunds, H.-----	Nov. 20, 1888	400,395	Currie, S. C. C.-----	Mar. 26, 1889
393,147	Edmunds, H.-----	Nov. 20, 1888	401,255	Currie, S. C. C.-----	Apr. 9, 1889
393,183	Stockcr, W. F.-----	Nov. 20, 1888	401,332	Currie, S. C. C.-----	Apr. 16, 1889
393,470	Griscom, W. W.-----	Nov. 27, 1888	402,190	Prescott, G. B., jr.-----	Apr. 30, 1889
393,744	Currie, S. C. C.-----	Dec. 4, 1888	402,191	Prescott, G. B., jr.-----	Apr. 30, 1889
393,757	Griscom, W. W.-----	Dec. 4, 1888	402,192	Prescott, G. B., jr.-----	Apr. 30, 1889
394,100	Currie, S. C. C.-----	Dec. 4, 1888	402,349	Pfatscher, M.-----	Apr. 30, 1889
394,541	Latsbaw, Z.-----	Dec. 11, 1888	404,968	Griscom, W. W.-----	June 11, 1889
394,642	Conant, T. P.-----	Dec. 18, 1888	405,897	Leonard, H. W. and Hanson, A.-----	June 25, 1889

171. GENERATION.—73. BATTERIES—THERMAL.

389,124	Weston, E.-----	Sept. 4, 1888	394,090	Woodward, H.-----	Dec. 4, 1888
389,125	Weston, E.-----	Sept. 4, 1888	398,272	Mestern, M.-----	Feb. 19, 1889

171. GENERATION.—23. FRICTION GENERATORS.

398,122	Birdsall, E. T.-----	Feb. 19, 1889	405,334	Waite, H. E.-----	June 18, 1889
401,156	Gläser, H.-----	Apr. 9, 1889			

171. GENERATION.—95. GALVANOMETERS.

386,648	Miot, G.-----	July 24, 1888	394,728	Shallenberger, O. B.-----	Dec. 18, 1888
386,992	Lange, P.-----	July 31, 1888	395,974	Hayes, H. V. and White, A. C.-----	Jan. 8, 1889
386,993	Lange, P.-----	July 31, 1888	397,966	Carcy, W. A.-----	Feb. 19, 1889
387,181	Anthony, W. A.-----	July 31, 1888	399,292	Siemens, W.-----	Mar. 12, 1889
389,274	Weston, E.-----	Sept. 11, 1888	400,661	Gipperich, A.-----	Apr. 2, 1889
390,067	Chisholm, I. W.-----	Sept. 25, 1888	400,662	Gipperich, A.-----	Apr. 2, 1889
390,115	Delany, P. B.-----	Sept. 25, 1888	400,663	Gipperich, A.-----	Apr. 2, 1889
391,592	Eddy, A. H.-----	Oct. 23, 1888	400,980	Weston, E.-----	Apr. 9, 1889
392,018	Emerson, V. H.-----	Oct. 30, 1888	401,428	Gipperich, A.-----	Apr. 16, 1889
392,385	Weston, E.-----	Nov. 6, 1888	401,617	White, A. C.-----	Apr. 16, 1889
392,386	Weston, E.-----	Nov. 6, 1888	403,311	Weston, E.-----	May 14, 1889
392,387	Weston, E.-----	Nov. 6, 1888	403,312	Weston, E.-----	May 14, 1889
392,476	Weston, E.-----	Nov. 6, 1888	404,470	Daft, L.-----	June 4, 1889
392,477	Weston, E.-----	Nov. 6, 1888	404,860	Pfannkuche, G.-----	June 11, 1889
392,478	Weston, E.-----	Nov. 6, 1888	404,861	Pfannkuche, G.-----	June 11, 1889
393,088	Waterhouse, A. G.-----	Nov. 20, 1888			

171. GENERATION.—27. INDUCTION-COILS.

No.	NAME.	DATE.	No.	NAME.	DATE.
387,013	Shallenberger, O. B. and Bylesby, H. M.	July 31, 1888	400,862	Lowrie, W. and Hall, C. J.	Apr. 2, 1889
387,123	Thomson, E.	July 31, 1888	400,972	Thomson, E.	Apr. 9, 1889
388,482	Eisenhart, C. A.	Aug. 28, 1888	401,041	Lewin, J. J.	Apr. 9, 1889
389,640	Cox, H. B.	Sept. 18, 1888	401,366	Osborn, C. V.	Apr. 16, 1889
389,838	De Ferranti, S. Z.	Sept. 18, 1888	403,492	Smith, T. J.	May 14, 1889
395,932	Waite, H. E.	Jan. 8, 1889	403,541	Lemp, H.	May 21, 1889
397,461	Gutmann, L.	Feb. 5, 1889	404,114	Schmid, A.	May 28, 1889
397,910	Gutmann, L.	Feb. 19, 1889	404,630	Kelly, J. F.	June 4, 1889
			404,822	Brown, F. H.	June 11, 1889

171. GENERATION.—33. MAGNETO-ELECTRIC.

385,458	Harding, A.	July 3, 1888	395,622	Kelly, J. F.	Jan. 1, 1889
385,943	Mitchell, F. B.	July 10, 1888	396,086	Hoffmann, C.	Jan. 15, 1889
386,340	Miot, G.	July 17, 1888	396,149	Eickemeyer, R.	Jan. 15, 1889
386,685	Brown, C. E. L.	July 24, 1888	396,195	Daft, L.	Jan. 15, 1889
386,775	Fritsche, W.	July 24, 1888	396,355	Dyer, I. T.	Jan. 15, 1889
387,010	Schmid, A.	July 31, 1888	396,581	Loomis, O. P.	Jan. 22, 1889
387,343	Crompton, R. E. B.	Aug. 7, 1888	396,941	Knowles, E. R.	Jan. 29, 1889
387,482	Meston, A. W.	Aug. 7, 1888	396,942	Knowles, E. R.	Jan. 29, 1889
388,093	Waddell, M.	Aug. 21, 1888	397,007	Kester, J. F.	Jan. 29, 1889
388,513	Van Gestel, J. T.	Aug. 28, 1888	397,340	Cohen, R. L.	Feb. 5, 1889
389,011	Riker, A. L.	Sept. 4, 1888	397,392	Shallenberger, O. B.	Feb. 5, 1889
389,184	Zech, Otto.	Sept. 4, 1888	397,492	Eickemeyer, R.	Feb. 12, 1889
389,658	Knight, W. H.	Sept. 18, 1888	397,550	Hunter, R. M.	Feb. 12, 1889
389,752	Lauckert, E. F. H. H.	Sept. 18, 1888	397,705	Edison, T. A.	Feb. 12, 1889
389,779	Thomson, E.	Sept. 18, 1888	398,913	Thomson, E.	Mar. 5, 1889
389,812	Hicks, T. H.	Sept. 18, 1888	399,088	Silvey, W. L.	Mar. 5, 1889
389,894	Meyers, W. G. and Coward, F. E.	Sept. 25, 1888	399,213	Robertson, J. H.	Mar. 5, 1889
389,974	Pfannkuche, G. and A.	Sept. 25, 1888	399,320	Du Laney, G. L.	Mar. 12, 1889
390,180	Mather, W. and Hopkinson, J. and E.	Sept. 25, 1888	399,328	Hayes, J. A.	Mar. 12, 1889
			399,329	Heywood, B.	Mar. 12, 1889
390,301	Hill, W. S.	Oct. 2, 1888	399,403	Higham, D.	Mar. 12, 1889
390,318	Thomson, E.	Oct. 2, 1888	399,404	Higham, D.	Mar. 12, 1889
390,414	Tesla, N.	Oct. 2, 1888	399,646	Balet, J. W.	Mar. 19, 1889
390,415	Tesla, N.	Oct. 2, 1888	399,800	Thomson, E.	Mar. 19, 1889
390,439	Bradley, C. S.	Oct. 2, 1888	400,130	Silvey, W. L.	Mar. 26, 1889
390,721	Tesla, N.	Oct. 9, 1888	400,139	Stewart, R. E.	Mar. 26, 1889
390,906	Ries, E. E.	Oct. 9, 1888	400,833	Entz, J. B.	Apr. 2, 1889
390,912	Shallenberger, O. B.	Oct. 9, 1888	400,973	Thomson, E.	Apr. 9, 1889
390,955	Emmner, J., jr.	Oct. 9, 1888	401,317	Weston, E.	Apr. 9, 1889
391,070	Parrish, M. W. and Cole, W. R.	Oct. 16, 1888	401,318	Weston, E.	Apr. 9, 1889
391,270	Pfannkuche, G.	Oct. 16, 1888	401,632	Billberg, C. O. C.	Apr. 16, 1889
392,490	Billings, C. E.	Nov. 6, 1888	401,668	Weston, E.	Apr. 16, 1889
392,660	Bidwell, B.	Nov. 13, 1888	401,669	Weston, E.	Apr. 16, 1889
392,765	Thomson, E.	Nov. 13, 1888	401,761	Shawhan, J. F.	Apr. 23, 1889
392,266	Riker, A. L.	Nov. 20, 1888	402,066	Coerper, C.	Apr. 23, 1889
393,422	Craig, T. E.	Nov. 27, 1888	402,200	Statter, J. G.	Apr. 30, 1889
393,469	Griscom, W. W.	Nov. 27, 1888	403,018	Wheeler, S. S.	May 7, 1889
393,636	Freeman, W. P.	Nov. 27, 1888	403,487	Perret, F. A.	May 14, 1889
393,742	Collins, W. C.	Dec. 4, 1888	403,630	Willson, T. L.	May 21, 1889
393,745	Daft, L.	Dec. 4, 1888	403,905	Blades, H. H.	May 28, 1889
393,849	Nutting, S. E.	Dec. 4, 1888	404,068	Belding, W. S.	May 28, 1889
394,095	Buckingham, C. L.	Dec. 4, 1888	404,434	Hochhausen, W.	June 4, 1889
394,797	Tregoning, J.	Dec. 18, 1888	404,712	Kester, J. F.	June 4, 1889
394,818	Bradley, C. S.	Dec. 18, 1888	404,713	Kester, J. F.	June 4, 1889
394,819	Bradley, C. S.	Dec. 18, 1888	404,714	Kester, J. F.	June 4, 1889
394,883	Riethmann, G. W.	Dec. 18, 1888	404,715	Kester, J. F.	June 4, 1889
394,905	Belding, W. S.	Dec. 18, 1888	405,002	Bishop, W. S.	June 11, 1889
394,978	Hauss, D. J.	Dec. 25, 1888	405,284	Thone, F.	June 18, 1889
394,999	Rice, E. W., jr.	Dec. 25, 1888	405,441	Sperry, E. A.	June 18, 1889
395,019	Von Hefner-Alteneck, F. and Hoffmann, C.	Dec. 25, 1888	405,471	Gleeson, T.	June 18, 1889
			405,507	Sandwell, W. D.	June 18, 1889
395,123	Edison, T. A.	Dec. 25, 1888	405,602	Rosenqvist, C. L.	June 18, 1889
395,157	Loomis, F. F.	Dec. 25, 1888	406,015	Willson, T. L.	June 25, 1889
395,260	Belding, W. S.	Dec. 25, 1888			

171. GENERATION.—76. MAGNETO-ELECTRIC—HAND-MACHINES.

333,071	Humans, W.	July 10, 1888	394,172	Gray, E.	Dec. 11, 1888
333,377	Humans, W.	Sept. 4, 1888	396,557	Gmür, B. & Flatz, O.	Jan. 22, 1889
391,224	Blair, J. B.	Oct. 16, 1888	400,327	Ginochio, N. B.	Mar. 26, 1889

171. GENERATION.—34. METERS.

No.	NAME.	DATE.	No.	NAME.	DATE.
385,647	Thomson, E	July 3, 1888	395,018	Thomson, E	Dec. 25, 1888
387,505	Forbes, G	Aug. 7, 1888	396,403	Jaquemier, M. J. R	Jan. 22, 1889
388,003	Shallenberger, O. B	Aug. 14, 1888	396,645	Card, G. F	Jan. 22, 1889
388,004	Shallenberger, O. B	Aug. 14, 1888	397,538	Cutler, H. H	Feb. 5, 1889
388,583	Raab, K	Aug. 28, 1888	399,336	Lauckert, E. F. H. II	Mar. 12, 1889
388,707	Morris, H. G	Aug. 28, 1888	401,191	Manwaren, A. II	Apr. 9, 1889
389,870	Bishop, J. D	Sept. 25, 1888	401,225	Smith, W. F	Apr. 9, 1889
391,010	Bentz, H	Oct. 16, 1888	401,226	Smith, W. F	Apr. 9, 1889
392,437	Lange, P	Nov. 6, 1888	401,803	Thomson, E	Apr. 23, 1889
392,438	Lange, P	Nov. 6, 1888	402,410	Davis, D. L	Apr. 30, 1889
392,439	Lange, P	Nov. 6, 1888	403,244	Brillié, L	May 14, 1889
392,577	Wurts, A	Nov. 6, 1888	404,310	Sellon, R. P	May 28, 1889
393,132	Wagner, F. C	Nov. 20, 1888	404,801	Slattery, M. M. M	June 4, 1889
393,315	Stocker, W. F	Nov. 20, 1888	405,249	Dahl, O	June 18, 1889
394,880	Reckenzaun, A. and Pentz, J. A	Dec. 18, 1888	405,399	Diehl, R. and P	June 18, 1889
394,881	Reckenzaun, A	Dec. 18, 1888	406,010	Thomson, E	June 25, 1889

171. GENERATION.—40. REGULATORS.

386,602	Parsons, H. W. and Hoduit, J.	July 24, 1888	397,613	Rice, E. W., jr	Feb. 12, 1889
387,194	Waterhouse, A. G	July 31, 1888	397,616	Thomson, E	Feb. 12, 1889
387,195	Waterhouse, A. G	July 31, 1888	397,773	Blades, H. II	Feb. 12, 1889
387,853	Buckingham, C. L. and Lemp, H	Aug. 14, 1888	398,668	Sperry, E. A	Feb. 26, 1889
389,029	Waterhouse, A. G	Sept. 4, 1888	398,744	Nutting, S. E	Feb. 26, 1889
389,030	Waterhouse, A. G	Sept. 4, 1888	398,926	Balet, J. W	Mar. 5, 1889
389,265	Thomson, E	Sept. 11, 1888	398,927	Balet, J. W	Mar. 5, 1889
390,820	Tesla, N	Oct. 9, 1888	399,147	Kester, J. F	Mar. 5, 1889
390,910	Shallenberger, O. B	Oct. 9, 1888	399,224	Wagner, F. C	Mar. 5, 1889
390,930	Westinghouse, G., Jr	Oct. 9, 1888	399,401	Higham, D	Mar. 12, 1889
391,114	Brush, C. F	Oct. 16, 1888	399,402	Higham, D	Mar. 12, 1889
391,319	Harris, L. S	Oct. 16, 1888	400,315	Dobbie, R. S	Mar. 26, 1889
391,954	Field, S. D	Oct. 30, 1888	400,680	Higham, D	Apr. 2, 1889
392,167	Roberts, I. L	Oct. 30, 1888	400,726	Balet, J. W	Apr. 2, 1889
392,370	Sellon, R. P. and Mordey, W. M	Nov. 6, 1888	401,230	Van Depoele, C. J	Apr. 9, 1889
392,855	Coburn, E. B	Nov. 13, 1888	403,017	Wheeler, S. S	May 7, 1889
392,890	Stanley, W., jr	Nov. 13, 1888	403,158	Walter, H. E	May 14, 1889
393,448	Pfannkuche, G	Nov. 27, 1888	403,836	Gravier, A. T	May 21, 1889
394,035	Van Depoele, C. J	Dec. 4, 1888	404,120	Stanley, W., jr	May 23, 1889
395,492	Gartner, A	Jan. 1, 1889	404,324	Van Depoele, C. J	May 28, 1889
396,422	Pfannkuche, G	Jan. 22, 1889	404,602	Clark, E. P	June 4, 1889
396,580	Loomis, O. P	Jan. 22, 1889	404,783	Gartner, A	June 4, 1889
396,602	Rice, E. W., jr	Jan. 22, 1889	404,859	Pfannkuche, G	June 11, 1889
396,725	Blades, H. H	Jan. 29, 1889	405,174	Pfannkuche, G	June 11, 1889
396,867	Grant, P	Jan. 29, 1889	405,218	Loomis, O. P	June 11, 1889
396,932	Holt, A. J	Jan. 29, 1889	405,263	Lemp, H	June 18, 1889
397,006	Kester, J. F	Jan. 29, 1889	405,743	Robertson, J. II	June 25, 1889

171. GENERATION.—97. SYSTEMS OF DISTRIBUTION.

386,796	Belfield, R	July 31, 1888	393,756	Griscom, W. W	Dec. 4, 1888
386,797	Belfield, R	July 31, 1888	396,549	Dickerson, E. N., jr	Jan. 22, 1889
386,936	Slattery, M. M. M	July 31, 1888	396,582	Loomis, O. P	Jan. 22, 1889
387,117	Stanley, W., jr	July 31, 1888	396,603	Rice, E. W., jr, and Rohrer, A. L	Jan. 22, 1889
389,795	De Ferranti, S. Z	Sept. 18, 1888			
390,413	Tesla, N	Oct. 2, 1888	399,218	Stillwell, L. B	Mar. 5, 1889
390,911	Shallenberger, O. B	Oct. 9, 1888	399,219	Stillwell, L. B	Mar. 5, 1889
390,990	Shallenberger, O. B	Oct. 9, 1888	399,534	Hicks, T. II	Mar. 12, 1889
391,437	Thomson, E	Oct. 23, 1888	399,639	Westinghouse, G., jr	Mar. 12, 1889
391,595	Edison, T. A	Oct. 23, 1888	400,486	Rice, E. W., jr	Apr. 2, 1889
392,090	Zipernowsky, C., Déri, M., and Bláthy, O. T.	Oct. 30, 1888	400,515	Thomson, E	Apr. 2, 1889
			400,516	Thomson, E	Apr. 2, 1889
392,114	Fraleigh, G. B	Oct. 30, 1888	401,608	Thomson, E	Apr. 16, 1889
392,213	McElroy, W. J	Nov. 6, 1888	402,671	Hicks, T. H	May 7, 1889
392,513	Heisler, C	Nov. 6, 1888	402,971	Ries, E. E	May 7, 1889
393,073	McElroy, W. J. and McTighe, T. J.	Nov. 20, 1888			

172. MOTIVE POWER.—9. CAR BRAKES.

394,627	Widdifield, W. P. and Bowman, A. H.	Dec. 18, 1888	398,577	Bowman, A. H. and Widdifield, W. P.	Feb. 26, 1889
395,682	Ambler, A. I	Jan. 8, 1889	405,964	Kinsman, F. E.	June 25, 1889

172. MOTIVE POWER.—75. LOCOMOTION.

No.	NAME.	DATE.	No.	NAME.	DATE.
385,379	Short, S. H.	July 3, 1888	396,196	Daft, L.	Jan. 15, 1889
385,413	Heysinger, I. W.	July 3, 1888	396,310	Van Depoele, C. J.	Jan. 15, 1889
385,672	Hunter, R. M.	July 3, 1888	396,311	Van Depoele, C. J.	Jan. 15, 1889
385,727	Salisbury, W. S.	July 10, 1888	396,312	Van Depoele, C. J.	Jan. 15, 1889
385,774	Roberts, De W. C.	July 10, 1888	396,313	Van Depoele, C. J.	Jan. 15, 1889
385,787	Bentley, E. M.	July 10, 1888	396,613	Short, S. H.	Jan. 22, 1889
385,902	Bentley, E. M.	July 10, 1888	396,633	Weems, D. G.	Jan. 22, 1889
385,903	Bentley, E. M.	July 10, 1888	396,792	Williams, J. T.	Jan. 29, 1889
385,915	Daft, L.	July 10, 1888	397,451	Van Depoele, C. J.	Feb. 5, 1889
385,928	Heald, E. W.	July 10, 1888	397,875	Sprague, F. J.	Feb. 12, 1889
386,085	Ries, E. E.	July 10, 1888	398,222	Brill, J. A.	Feb. 19, 1889
386,086	Ries, E. E.	July 10, 1888	398,402	Hunter, R. M.	Feb. 26, 1889
386,087	Ries, E. E.	July 10, 1888	398,489	Brady, T. H.	Feb. 26, 1889
386,184	Chesebrough, R. A.	July 17, 1888	398,498	Dahl, O.	Feb. 26, 1889
386,282	Woods, G. T.	July 17, 1888	398,661	Short, S. H.	Feb. 26, 1889
386,543	Jarman, A. J.	July 24, 1888	398,662	Short, S. H.	Feb. 26, 1889
386,581	Enos, J. A.	July 24, 1888	398,663	Short, S. H.	Feb. 26, 1889
386,784	Knight, W. H.	July 24, 1888	398,814	Blake, H. T.	Mar. 5, 1889
387,382	Weems, D. G.	Aug. 7, 1888	398,963	Heysinger, I. W.	Mar. 5, 1889
387,383	Weems, D. G.	Aug. 7, 1888	399,091	Smith, H. W.	Mar. 5, 1889
388,247	Blackwell, J. L.	Aug. 21, 1888	399,092	Smith, H. W.	Mar. 5, 1889
388,514	Van Gestel, J. T.	Aug. 28, 1888	399,137	Dyer, R. N.	Mar. 5, 1889
388,538	Daft, L.	Aug. 28, 1888	399,236	Blair, J. B.	Mar. 12, 1889
388,859	Green, G. F.	Sept. 4, 1888	399,372	Bradley, C. S.	Mar. 12, 1889
388,955	Daft, L.	Sept. 4, 1888	399,409	Hunter, R. M.	Mar. 12, 1889
389,189	Blackwell, J. L.	Sept. 11, 1888	399,599	Condict, G. H.	Mar. 12, 1889
389,229	Knight, W. H.	Sept. 11, 1888	399,732	Blake, E.	Mar. 19, 1889
389,230	Knight, W. H.	Sept. 11, 1888	399,882	Van Depoele, C. J.	Mar. 19, 1889
389,254	Shepardson, G. D.	Sept. 11, 1888	400,038	Bentley, E. M.	Mar. 26, 1889
389,278	Bentley, E. M.	Sept. 11, 1888	400,179	Bentley, E. M.	Mar. 26, 1889
389,279	Bentley, E. M.	Sept. 11, 1888	400,180	Bentley, E. M.	Mar. 26, 1889
389,281	Blackwell, J. L.	Sept. 11, 1888	400,181	Bentley, E. M.	Mar. 26, 1889
389,282	Blackwell, J. L.	Sept. 11, 1888	400,182	Bentley, E. M.	Mar. 26, 1889
389,822	Nicholson, J. D., McElroy, W. J. and McTighe, T. J.	Sept. 18, 1888	400,300	Chase, H. A.	Mar. 26, 1889
391,394	Weems, D. G.	Oct. 16, 1888	400,375	Van Depoele, C. J.	Mar. 26, 1889
391,447	Wright, P.	Oct. 23, 1888	400,724	Ainslie, D. A.	Apr. 2, 1889
391,792	Heysinger, I. W.	Oct. 30, 1888	400,725	Ainslie, D. A.	Apr. 2, 1889
391,793	Heysinger, I. W.	Oct. 30, 1888	400,830	Condict, G. H. and Angerer, V.	Apr. 2, 1889
392,127	Love, J. C.	Oct. 30, 1888	400,916	Hunter, R. M.	Apr. 9, 1889
392,664	Chase, H. A.	Nov. 13, 1888	400,926	Lundell, R.	Apr. 9, 1889
392,675	Hunter, R. M.	Nov. 13, 1888	401,221	Short, S. H.	Apr. 9, 1889
392,757	Ries, E. E.	Nov. 13, 1888	401,322	Wynne, F.	Apr. 9, 1889
392,772	Allen, O.	Nov. 13, 1888	401,515	Reed, F. H.	Apr. 16, 1889
392,863	Heywood, B.	Nov. 13, 1888	401,616	Wheeler, F.	Apr. 16, 1889
392,967	Patten, F. J.	Nov. 13, 1888	401,796	Short, S. H.	Apr. 23, 1889
392,971	Robbins, I.	Nov. 13, 1888	401,797	Short, S. H.	Apr. 23, 1889
393,012	Kames, J.	Nov. 20, 1888	401,970	Sandwell, W. D.	Apr. 23, 1889
393,013	Kames, J.	Nov. 20, 1888	402,064	Christy, W.	Apr. 23, 1889
393,224	Field, S. D.	Nov. 20, 1888	402,080	Henderson, J. W.	Apr. 23, 1889
393,275	Van Depoele, C. J.	Nov. 20, 1888	402,084	Hunter, R. M.	Apr. 23, 1889
393,276	Van Depoele, C. J.	Nov. 20, 1888	402,117	Van Depoele, C. J.	Apr. 23, 1889
393,277	Van Depoele, C. J.	Nov. 20, 1888	402,311	De Ferranti, S. Z.	Apr. 30, 1888
393,278	Van Depoele, C. J.	Nov. 20, 1888	402,332	Hunter, R. M.	May 7, 1889
393,280	Weems, D. G.	Nov. 20, 1888	402,336	Jennings, B.	May 7, 1889
393,317	Van Depoele, C. J.	Nov. 20, 1888	403,009	Van Depoele, C. J.	May 7, 1889
393,323	Condict, G. H.	Nov. 20, 1888	403,011	Van Depoele, C. J.	May 7, 1889
393,572	Paget, L.	Nov. 27, 1888	403,092	Daft, L.	May 14, 1889
393,622	Dallas, M.	Nov. 27, 1888	403,192	Hunter, R. M.	May 14, 1889
393,749	Fisher, F. E.	Dec. 4, 1888	403,193	Hunter, R. M.	May 14, 1889
394,015	Salisbury, W. S.	Dec. 4, 1888	403,549	Orford, J. M.	May 21, 1889
394,037	Van Depoele, C. J.	Dec. 4, 1888	403,754	Hunter, R. M.	May 21, 1889
394,038	Van Depoele, C. J.	Dec. 4, 1888	403,786	Speed, F. M.	May 21, 1889
394,039	Van Depoele, C. J.	Dec. 4, 1888	403,800	Van Depoele, C. J.	May 21, 1889
394,062	Daft, L.	Dec. 4, 1888	403,801	Van Depoele, C. J.	May 21, 1889
394,139	Short, S. H.	Dec. 4, 1888	403,969	Streat, T.	May 28, 1889
394,161	Dulles, W., jr.	Dec. 11, 1888	404,139	Westinghouse, G., jr.	May 28, 1889
394,621	Smith, M. H.	Dec. 18, 1888	404,149	Ainslie, D. A.	May 28, 1889
394,735	Stevens, W. L.	Dec. 18, 1888	404,325	Van Depoele, C. J.	May 28, 1889
394,887	Short, S. H.	Dec. 18, 1888	404,441	Shaw, H. F., and G. F.	June 4, 1889
395,442	Jennings, B.	Jan. 1, 1889	404,469	Cannel, W.	June 4, 1889
395,703	Jenkins, W. F.	Jan. 8, 1889	404,559	Priest, E. D.	June 4, 1889
395,761	Trott, S.	Jan. 8, 1889	404,687	Daft, L.	June 4, 1889
395,961	Dyer, R. N.	Jan. 8, 1889	404,873	Short, S. H.	June 11, 1889
396,124	Wells, C. H.	Jan. 15, 1889	405,194	Williams, J. T.	June 11, 1889
			405,365	Lineff, A. L.	June 18, 1889

172. MOTIVE POWER.—75. LOCOMOTION—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
405,468	Flad, H -----	June 18, 1889	405,628	Van Depoele, C. J -----	June 25, 1889
405,544	Fisher, F. E -----	June 18, 1889	405,750	Van Depoele, C. J -----	June 25, 1889
405,556	Hunter, R. M -----	June 18, 1889	405,767	Brewer, W. J -----	June 25, 1889
405,626	Van Depoele, C. J -----	June 18, 1889	405,978	Allen, R. N -----	June 25, 1889
405,627	Van Depoele, C. J -----	June 18, 1889			

172. MOTIVE POWER.—36. MOTORS.

385,675	Lugo, O -----	July 3, 1888	396,791	Whittingham, G. H -----	Jan. 29, 1889
387,160	Guntz, G -----	July 31, 1888	397,439	Patten, F. J -----	Feb. 5, 1889
387,310	Mather, R. H -----	Aug. 7, 1888	397,702	Denison, J. F -----	Feb. 12, 1889
387,714	Fiske, B. A -----	Aug. 14, 1888	397,817	Patten, F. J -----	Feb. 12, 1889
388,512	Van Gestel, J. T -----	Aug. 28, 1888	398,457	Shallenberger, O. B -----	Feb. 26, 1889
388,753	Batley, J -----	Aug. 28, 1888	398,458	Shallenberger, O. B -----	Feb. 26, 1889
389,197	Chase, H. A -----	Sept. 11, 1888	398,794	Patten, F. J -----	Feb. 26, 1889
389,207	Eastwick, A. E -----	Sept. 11, 1888	399,059	Lugo, O -----	Mar. 5, 1889
389,352	Anthony, W. A -----	Sept. 11, 1888	399,507	Eddy, A. H -----	Mar. 12, 1889
389,796	Doriot, C -----	Sept. 18, 1888	399,801	Thomson, E. and Wightman, M. J. -----	Mar. 19, 1889
389,876	Diehl, P -----	Sept. 25, 1888			
390,904	Ries, E. E -----	Oct. 9, 1888	399,822	Blades, H. H -----	Mar. 19, 1889
390,905	Ries, E. E -----	Oct. 9, 1888	400,311	Davis, E. H. and Westervelt, R. -----	Mar. 26, 1889
390,921	Van Depoele, C. J -----	Oct. 9, 1888	400,809	Van Depoele, C. J -----	Apr. 2, 1889
391,590	Doyle, J -----	Oct. 23, 1888	400,890	Bain, F -----	Apr. 9, 1889
391,593	Eddy, A. H -----	Oct. 23, 1888	400,971	Thomson, E -----	Apr. 9, 1889
391,797	Hyer, W. E -----	Oct. 30, 1888	401,231	Van Depoele, C. J -----	Apr. 9, 1889
392,470	Stanley, W., jr -----	Nov. 6, 1888	401,520	Tesla, N -----	Apr. 16, 1889
392,471	Stanley, W., jr -----	Nov. 6, 1888	402,290	Yeiser, F -----	Apr. 30, 1889
392,930	Patten, F. J -----	Nov. 13, 1888	402,990	Silvey, W. L -----	May 7, 1889
393,373	Keller, F. J. and Carnes, J. W. -----	Nov. 27, 1888	404,067	Belding, W. S -----	May 28, 1889
394,036	Van Depoele, C. J -----	Dec. 4, 1888	404,069	Belding, W. S -----	May 28, 1889
394,075	Lugo, O -----	Dec. 4, 1888	404,465	Bradley, C. S -----	June 4, 1889
394,417	Van Depoele, C. J -----	Dec. 11, 1888	404,466	Bradley, C. S -----	June 4, 1889
394,525	Van Depoele, C. J -----	Dec. 11, 1888	404,533	Gartner, A -----	June 4, 1889
395,299	Sweet, D. F -----	Dec. 25, 1888	404,651	Paca, W. S -----	June 4, 1889
395,575	Marvin, H. N -----	Jan. 1, 1889	404,661	Slater, H. B -----	June 4, 1889
396,121	Tesla, N -----	Jan. 15, 1889	405,223	Perret, F. A -----	June 11, 1889
396,269	Coerper, C -----	Jan. 15, 1889	405,668	Hunter, R. M -----	June 18, 1889
396,314	Van Depoele, C. J -----	Jan. 15, 1889	405,858	Tesla, N -----	June 25, 1889

172. MOTIVE POWER.—8. STEERING AND PROPULSION.

388,300	O'Kelly, J -----	Aug. 21, 1888	388,862	Griswold, H. P -----	Sept. 4, 1888
---------	------------------	---------------	---------	----------------------	---------------

172. MOTIVE POWER.—83. TRANSMISSION OF POWER.

404,566	Shallenberger, O. B -----	June 4, 1889	405,859	Tesla, N -----	June 25, 1889
404,567	Shallenberger, O. B -----	June 4, 1889			

173. CONDUCTORS.—13. CONDUCTORS.

385,576	Sibley, C. C -----	July 3, 1888	399,826	Brooks, A. A -----	Mar. 19, 1889
386,561	Sawyer, W. H -----	July 24, 1888	400,552	Donaldson, R. S -----	Apr. 2, 1889
388,477	Conner, W. A -----	Aug. 28, 1888	401,498	Johnson, E. H. and Greenfield, E. T -----	Apr. 16, 1889
388,487	Harris, A. E -----	Aug. 28, 1888			
391,517	Cuff, J. E -----	Oct. 23, 1888	401,936	Egleston, T -----	Apr. 23, 1889
391,605	Hall, E. J -----	Oct. 23, 1888	403,267	Heimann, S -----	May 14, 1889
395,546	Conner, W. A -----	Jan. 1, 1889	404,902	Edison, T. A -----	June 11, 1889
398,441	Patterson, W. R -----	Feb. 26, 1889	404,913	Johns, H. W., jr -----	June 11, 1889
398,442	Patterson, W. R -----	Feb. 26, 1889	405,546	Trist, R. P -----	June 18, 1889

173. CONDUCTORS.—94. CONDUCTORS—LEAD-COVERED.

399,291	Siemens, W -----				Mar. 12, 1889
---------	------------------	--	--	--	---------------

173. CONDUCTORS.—70. CONDUCTORS—UNDERGROUND.

No.	NAME.	DATE.	No.	NAME.	DATE.
388,442	Phipps, E. H.-----	Aug. 28, 1888	400,764	Greene, P. R.-----	Apr. 2, 1889
389,943	Silliman, R. F.-----	Sept. 23, 1888	400,958	Seely, J. A.-----	Apr. 9, 1889
391,587	Dallas, M.-----	Oct. 23, 1888	401,154	Gillette, G. H. and K. C.-----	Apr. 9, 1889
393,346	Whelan, J.-----	Nov. 20, 1888	401,155	Gillette, G. H. and K. C.-----	Apr. 9, 1889
393,823	Flotron, E. and De La Bastie, F. B. A. R.-----	Dec. 4, 1888	401,927	Brooks, D., jr.-----	Apr. 23, 1889
394,207	Paige, D. O.-----	Dec. 11, 1888	402,007	Deweese, T. J.-----	Apr. 23, 1889
395,584	Phipps, E. H.-----	Jan. 1, 1889	402,563	Colgate, A. E.-----	May 7, 1889
396,407	Lynch, J.-----	Jan. 22, 1889	402,565	Cook, G. W.-----	May 7, 1889
397,221	Callender, W. M.-----	Feb. 5, 1889	403,352	Lake, W.-----	May 14, 1889
397,300	Mack, W. B.-----	Feb. 5, 1889	403,418	Colgate, A. E.-----	May 14, 1889
399,343	Penney, W. L. and Little, T.-----	Mar. 12, 1889	403,825	Cole, C. B.-----	May 21, 1889
400,308	Cranmer, W. C. and Arnold, S. W.-----	Mar. 26, 1889	404,877	Tailleur, G. E.-----	June 11, 1889
			405,515	Warde, G. H.-----	June 18, 1889
			405,576	Lynch, J.-----	June 18, 1889

173. CONDUCTORS.—14. CONNECTORS.

389,314	McIntire, C.-----	Sept. 11, 1888	398,769	Currie, S. C. C.-----	Feb. 26, 1889
394,837	De Ferranti, S. Z.-----	Dec. 18, 1888	399,326	Griggs, A. C.-----	Mar. 12, 1889
394,838	De Ferranti, S. Z.-----	Dec. 18, 1888	401,244	Basel, J. C.-----	Apr. 9, 1889
396,176	Simpson, D. J.-----	Jan. 15, 1889	402,829	Hopkins, G. I.-----	May 7, 1889
396,543	Cobb, H. B.-----	Jan. 22, 1889	403,010	Van Depoele, C. J.-----	May 7, 1889
397,424	Griscom, W. W. and Weidner, H. N.-----	Feb. 5, 1889	403,308	Thompson, E. P.-----	May 14, 1889
397,553	Johnston, W. C., jr.-----	Feb. 12, 1889	404,813	Widdicombe, R. H.-----	June 4, 1889

173. CONDUCTORS.—28. INSULATORS.

386,111	Cutler, H. H.-----	July 17, 1888	398,025	Brown, W. C.-----	Feb. 19, 1889
386,986	Joslin, W. E.-----	July 31, 1888	402,592	Heaviside, A. W.-----	May 7, 1889
390,741	Adams, T. E.-----	Oct. 9, 1888	402,752	Locke, F. M. and Lapp, J.-----	May 7, 1889
394,380	Lloyd, E. L.-----	Dec. 11, 1888	403,482	O'Beirne, W. H.-----	May 14, 1889
395,207	Bowen, C. H.-----	Dec. 25, 1888	403,491	Smith, T. J.-----	May 14, 1889
396,334	Gilson, S. H.-----	Jan. 15, 1889	403,727	Berrang, J. C.-----	May 21, 1889
396,847	Ashen, P.-----	Jan. 29, 1889			

173. CONDUCTORS.—31. LIGHTNING RODS.

395,399	Mast, L. L.-----	Jan. 1, 1889	401,095	Wood, F. E.-----	Apr. 9, 1889
400,464	Lawshe, S. R.-----	Apr. 2, 1889			

173. CONDUCTORS.—43. RHEOSTATS.

10,944	Weston, E.---(Reis. of 381,304.)	July 17, 1888	395,116	Bergmann, S.-----	Dec. 25, 1888
10,945	Weston, E.---(Reis. of 381,305.)	July 17, 1888	398,121	Bergmann, S.-----	Feb. 19, 1889
387,463	Vansant, J. A. and Anderson, F. S.-----	Aug. 7, 1888	401,405	Benardos, N.-----	Apr. 16, 1889
387,464	Vansant, J. A. and Anderson, F. S.-----	Aug. 7, 1888	402,912	Entriken, J. B.-----	May 7, 1889
			403,345	Gish, J. L.-----	May 14, 1889

174. MEDICAL AND SURGICAL.—87. BATHS.

398,327	De Vars, H. A. B. H.-----	Feb. 19, 1889	398,731	James, J. W.-----	Feb. 26, 1889
---------	---------------------------	---------------	---------	-------------------	---------------

174. MEDICAL AND SURGICAL.—88. BODY-WEAR.

385,556	Hoke, C. U.-----	July 3, 1888	397,790	Fear, F.-----	Feb. 12, 1889
388,581	Pratt, H. P.-----	Aug. 28, 1888	397,806	Johnson, W. G.-----	Feb. 12, 1889
389,187	Baldwin, J. W.-----	Sept. 11, 1888	398,133	De Baun, S.-----	Feb. 19, 1889
389,764	Rutter, N. P.-----	Sept. 18, 1888	399,954	Warrell, N.-----	Mar. 19, 1889
390,354	Epplé, L.-----	Oct. 2, 1888	401,682	Brust, C.-----	Apr. 16, 1889
391,364	Granger, E. D.-----	Oct. 16, 1888	401,882	Grimley, C. H.-----	Apr. 23, 1889
391,720	Pratt, H. P.-----	Oct. 23, 1888	402,367	Van Dorn, W. L.-----	Apr. 30, 1889
393,741	Collins, W. C.-----	Dec. 4, 1888	402,491	Thomas, B. F.-----	Apr. 30, 1889
394,807	Bacon, A. H.-----	Dec. 18, 1888	405,176	Pratt, H. P.-----	June 11, 1889
394,958	Colling, S.-----	Dec. 25, 1888	405,436	Shelton, W. J.-----	June 18, 1889
396,212	Long, J. V.-----	Jan. 15, 1889			

174. MEDICAL AND SURGICAL.—89. ELECTRODES.

No.	NAME.	DATE.	No.	NAME.	DATE.
386,754	Muir, J. S.-----	July 24, 1888	397,474	Stanley, L. T.-----	Feb. 5, 1889
390,554	Woodward, J. H.-----	Oct. 2, 1888	399,084	Schmalz, J. B. and Faulkner, J. B.	Mar. 5, 1889

175. SPECIAL APPLICATIONS.—4. APPLICATIONS—GENERAL.

385,927	Hazell, J. W.-----	July 10, 1888	393,192	Thayer, R.-----	Nov. 20, 1888
10,949	Williams, P. G. and Roovers, A. W. (Reis. of 372,441.)	July 24, 1888	393,624	Durieux, C.-----	Nov. 27, 1888
386,860	Williams, P. G. and Roovers, A. W.	July 31, 1888	393,625	Durieux, C.-----	Nov. 27, 1888
386,919	Everitt, P.-----	July 31, 1888	393,828	Hall, A. E.-----	Dec. 4, 1888
389,799	Estabrook, W. W.-----	Sept. 18, 1888	394,332	Cadwallader, B.-----	Dec. 11, 1888
390,101	Tweedale, E.-----	Sept. 25, 1888	397,423	Greaves, J.-----	Feb. 5, 1889
390,113	Bullough, J.-----	Sept. 25, 1888	10,986	Belfield, R. (Reis. of 392,400.)	Feb. 19, 1889
390,196	Acheson, E. G.-----	Oct. 2, 1888	399,591	Williams, P. G. and Roovers, A. W.	Mar. 12, 1889
392,400	Belfield, R.-----	Nov. 6, 1888	402,157	Gilman, C. C.-----	Apr. 30, 1889
393,125	Schulte, W.-----	Nov. 20, 1888	404,600	Caspersson, C. A.-----	June 4, 1889
			405,124	Schmid, A.-----	June 11, 1889

175. SPECIAL APPLICATIONS.—5. APPLICATIONS—TOOLS AND MACHINES.

389,001	Ongley, C. E.-----	Sept. 4, 1888	403,442	Nickerson, W. E.-----	May 14, 1889
389,037	Wilkinson, E.-----	Sept. 4, 1888	403,691	Nickerson, W. E.-----	May 21, 1889
389,853	Ongley, C. E.-----	Sept. 18, 1888	404,015	Nickerson, W. E.-----	May 28, 1889
393,389	Paine, W. J.-----	Nov. 27, 1888	404,221	Nickerson, W. E.-----	May 28, 1889
394,952	Baxter, W., jr.-----	Dec. 25, 1888	404,361	McFeely, R. F.-----	May 28, 1889
395,524	Thayer, R.-----	Jan. 1, 1889	404,667	Woodhouse, D. A. and Forster, T. V.	June 4, 1889
399,341	McFeely, R. F. and Potter, H. V.	Mar. 12, 1889	404,893	Byrne, J. E.-----	June 11, 1889
399,716	Whittier, C.-----	Mar. 19, 1889	404,894	Byrne, J. E.-----	June 11, 1889
403,439	Nickerson, W. E.-----	May 14, 1889	404,895	Byrne, J. E.-----	June 11, 1889
403,440	Nickerson, W. E.-----	May 14, 1889			
403,441	Nickerson, W. E.-----	May 14, 1889			

175. SPECIAL APPLICATIONS.—21. ELECTRO-MAGNETS.

389,196	Chase, H. A.-----	Sept. 11, 1888	401,152	Geary, J.-----	Apr. 9, 1889
393,337	Lane, F. A.-----	Nov. 20, 1888	403,517	Cole, F. W.-----	May 21, 1889
400,795	Root, F. H.-----	Apr. 2, 1889			

175. SPECIAL APPLICATIONS.—16. HEATERS.

385,384	Thomson, E.-----	July 3, 1888	396,270	Coffin, C. L.-----	Jan. 15, 1889
385,385	Thomson, E.-----	July 3, 1888	396,836	Shawhan, J. F.-----	Jan. 29, 1889
385,386	Thomson, E.-----	July 3, 1888	397,857	Hunter, R. M.-----	Feb. 12, 1889
386,088	Ries, E. E.-----	July 10, 1888	398,912	Thomson, E.-----	Mar. 5, 1889
386,441	Thomson, E.-----	July 17, 1888	398,914	Thomson, E.-----	Mar. 5, 1889
388,245	Benardos, N.-----	Aug. 21, 1888	399,019	Coffin, C. L.-----	Mar. 5, 1889
388,246	Benardos, N.-----	Aug. 21, 1888	400,978	Watts, H. F.-----	Apr. 9, 1889
389,729	Wiest, J.-----	Sept. 18, 1888	401,482	Dewey, M. W.-----	Apr. 16, 1889
390,619	Ries, E. E.-----	Oct. 2, 1888	401,639	Coffin, C. L.-----	Apr. 16, 1889
394,892	Thomson, E.-----	Dec. 18, 1888	402,107	Ries, E. E.-----	Apr. 23, 1889
395,878	Coffin, C. E.-----	Jan. 8, 1889	402,108	Ries, E. E.-----	Apr. 23, 1889
395,950	Capek, J. V.-----	Jan. 8, 1889	402,416	Dewey, M. W.-----	Apr. 30, 1889
396,009	Thomson, E.-----	Jan. 8, 1889	403,110	Johnson, G. B. and M.-----	May 14, 1889
396,010	Thomson, E.-----	Jan. 8, 1889	403,157	Thomson, E.-----	May 14, 1889
396,011	Thomson, E.-----	Jan. 8, 1889	403,374	Ries, E. E.-----	May 14, 1889
396,012	Thomson, E.-----	Jan. 8, 1889	403,707	Thomson, E.-----	May 21, 1889
396,013	Thomson, E.-----	Jan. 8, 1889	403,708	Thomson, E.-----	May 21, 1889
396,014	Thomson, E.-----	Jan. 8, 1889	404,306	Ries, E. E.-----	May 28, 1889
396,015	Thomson, E.-----	Jan. 8, 1889	405,345	Coffin, C. L.-----	June 18, 1889
396,039	Thomson, E.-----	Jan. 8, 1889			

175. SPECIAL APPLICATIONS.—115. IGNITING DEVICES.

388,294	McGowen, J. J.-----	Aug. 21, 1888	392,665	Cleverly, H. A.-----	Nov. 13, 1888
389,151	Hogan, G. L.-----	Sept. 4, 1888	392,701	Thaxter, G. E.-----	Nov. 13, 1888
389,421	Tag, W. and Smith, S. C.-----	Sept. 11, 1888	393,304	Haskins, C. H.-----	Nov. 20, 1888
389,692	Downs, H. T.-----	Sept. 18, 1888	393,525	Shaw, N. H.-----	Nov. 27, 1888
392,440	Lehman, J. H.-----	Nov. 6, 1888	405,126	Shaw, N. H.-----	June 11, 1889

175. SPECIAL APPLICATIONS.—115. IGNITING DEVICES—AUTOMATIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
398,805 401,153	Steinhilber, A ----- Geary, J -----	Feb. 26, 1889 Apr. 9, 1889	403,944	Lehman, J. H -----	May 28, 1889

175. SPECIAL APPLICATIONS.—116. IGNITING DEVICES—MANUAL.

399,168 399,416 400,479	Tag, W. and Smith, S. C ----- Kronenberg, E ----- Parke, J. G -----	Mar. 5, 1889 Mar. 12, 1889 Apr. 2, 1889	400,492 402,332	Rousseau, D ----- Knowlton, D. C -----	Apr. 2, 1889 Apr. 30, 1889
-------------------------------	---	---	--------------------	---	-------------------------------

175. SPECIAL APPLICATIONS.—117. INCRUSTATION.

387,145 387,146 388,592	Clamer, F. J ----- Clamer, F. J ----- Siebel, J. E -----	July 31, 1888 July 31, 1888 Aug. 28, 1888	392,736 393,072	Kotyra, M ----- Marquand, A. J -----	Nov. 13, 1888 Nov. 20, 1888
-------------------------------	--	---	--------------------	---	--------------------------------

175. SPECIAL APPLICATIONS.—93. MAGNETIC LOCKS AND BOLTS.

386,066 390,795 393,282	Gridley, F. J ----- Neu, G. S ----- Wildt, E. A -----	July 10, 1888 Oct. 9, 1888 Nov. 20, 1888	393,711 396,723	Lüngen, A ----- Beers, C. B -----	Nov. 27, 1888 Jan. 29, 1889
-------------------------------	---	--	--------------------	--------------------------------------	--------------------------------

175. SPECIAL APPLICATIONS.—90. SEPARATORS.

390,229 393,348 396,356 399,375 400,317 400,746 400,747 401,414 401,415 401,638 402,654	Hempel, A ----- Atkins, C. H ----- Edison, T. A ----- Burden, J. A ----- Edison, T. A ----- Conkling, G ----- Conkling, G ----- Conkling, G ----- Conkling, G ----- Conkling, G ----- Coats, C. C ----- Maxim, H. S -----	Oct. 2, 1888 Nov. 27, 1888 Jan. 15, 1889 Mar. 12, 1889 Mar. 26, 1889 Apr. 2, 1889 Apr. 2, 1889 Apr. 16, 1889 Apr. 16, 1889 Apr. 16, 1889 May 7, 1889	402,904 403,250 403,256 403,575 403,576 403,624 404,332 404,333 404,334 405,045	Conkling, G ----- Cheever, J. D ----- Eames, H. II ----- Conkling, G ----- Conkling, G ----- Thomas, W. R ----- Ball, C. M. and Norton, S ----- Ball, C. M. and Norton, S ----- Ball, C. M. and Norton, S ----- Mowrer, M. L -----	May 7, 1889 May 14, 1889 May 14, 1889 May 21, 1889 May 21, 1889 May 21, 1889 May 28, 1889 May 28, 1889 May 28, 1889 June 11, 1889
---	--	--	--	---	--

175. SPECIAL APPLICATIONS.—84. VALVE CONTROLLERS.

386,463 389,097 392,679 393,396 397,260	Grah, E ----- Newman, E. A ----- Lee, G. M ----- Scribner, C. E ----- Wellens, R -----	July 24, 1888 Sept. 4, 1888 Nov. 13, 1888 Nov. 27, 1888 Feb. 5, 1889	398,314 401,582 401,801 402,779 405,010	Currier, II. L ----- Packard, J. W ----- Thompson, D. W ----- Steinhoff, A ----- Byrne, J. E -----	Feb. 19, 1889 Apr. 16, 1889 Apr. 23, 1889 May 7, 1889 June 11, 1889
---	--	--	---	--	---

176. ELECTRIC LIGHTING.—80. CUT-OUTS—ELECTRO-MAGNETIC.

385,494 391,853 392,724 394,485 395,533	Wright, C. D ----- McDill, H. C ----- Farnham, I. H ----- Griscom, W. W ----- Woods, G. T -----	July 3, 1888 Oct. 30, 1888 Nov. 13, 1888 Dec. 11, 1888 Jan. 1, 1889	396,439 396,940 399,400 403,941	Sperry, E. A ----- Knowles, E. R ----- Harvey, W. B ----- Knowles, E. R -----	Jan. 22, 1889 Jan. 29, 1889 Mar. 12, 1889 May 28, 1889
---	---	---	--	--	---

176. ELECTRIC LIGHTING.—79. CUT-OUTS—MECHANICAL.

385,539 385,782 385,815 385,826 387,526 387,732 390,481 391,351 391,512 391,943 392,034 392,633 393,365 393,590	Bergman, E. F ----- Wheeler, S. S ----- Mayo, J. E ----- Sechrist, A ----- McElroy, J. F ----- Powers, J. A ----- Johnson, W. A ----- Adams, J. S ----- Cleveland, W. B ----- Bryant, W. C ----- Johnson, O. B ----- Perkins, C. G ----- Griscom, W. W ----- Smith, D. W -----	July 3, 1888 July 10, 1888 July 10, 1888 July 10, 1888 Aug. 7, 1888 Aug. 14, 1888 Oct. 2, 1888 Oct. 16, 1888 Oct. 23, 1888 Oct. 30, 1888 Oct. 30, 1888 Nov. 13, 1888 Nov. 27, 1888 Nov. 27, 1888	394,180 394,568 395,609 396,632 396,880 397,109 397,715 397,729 397,826 398,288 398,510 398,560 398,561 399,134	Heisler, C ----- Griscom, W. W ----- Brangs, P. H ----- Waters, B. E ----- Knowles, E. R ----- Bussmann, O. S ----- Hammer, W. J ----- Knowles, E. R ----- Andrews, A. E ----- Stirling, C. C ----- Hill, W. S ----- Weller, F. A. and Rietzel, A. F ----- Weller, F. A. and Rietzel, A. F ----- Dillon, L. W -----	Dec. 11, 1888 Dec. 18, 1888 Jan. 1, 1889 Jan. 22, 1889 Jan. 29, 1889 Feb. 5, 1889 Feb. 12, 1889 Feb. 12, 1889 Feb. 12, 1889 Feb. 19, 1889 Feb. 26, 1889 Feb. 26, 1889 Feb. 26, 1889 Mar. 5, 1889
--	---	---	--	--	---

176. ELECTRIC LIGHTING.—79. CUT-OUTS—MECHANICAL—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
399,135	Dillon, L. W. -----	Mar. 5, 1889	400,808	Turner, J. A. -----	Apr. 2, 1889
399,550	Paiste, H. T. -----	Mar. 12, 1889	401,270	Griscom, W. W. -----	Apr. 9, 1889
400,732	Bergmann, S. -----	Apr. 2, 1889	405,248	Dahl, O. -----	June 18, 1889
400,733	Bergmann, S. -----	Apr. 2, 1889			

176. ELECTRIC LIGHTING.—78. CUT-OUTS—THERMAL.

385,770	Mingle, G. W. and M. -----	July 10, 1888	398,566	Wright, W. H. S. -----	Feb. 26, 1889
386,099	Wightman, M. J. and Lemp, H. -----	July 10, 1888	399,305	Wilson, C. H. -----	Mar. 12, 1889
391,594	Eddy, A. H. -----	Oct. 23, 1888	400,669	Hammer, W. J. -----	Apr. 2, 1889
393,473	Johnson, E. H. -----	Nov. 27, 1888	401,527	Whitney, E. R. -----	Apr. 16, 1889
395,421	Cockburn, A. C. -----	Jan. 1, 1889	402,249	Kimball, J. L. and Wirt, H. C. -----	Apr. 30, 1889
396,579	Loomis, O. P. -----	Jan. 22, 1889	402,753	Loomis, O. P. -----	May 7, 1889
396,920	Chamberlain, J. C. -----	Jan. 29, 1889	402,754	Loomis, O. P. -----	May 7, 1889

176. ELECTRIC LIGHTING.—105. LIGHTS—ARC, GRAVITY FEED, CLUTCH.

390,245	Mather, R. H. -----	Oct. 2, 1888	400,352	Miller, W. H. -----	Mar. 26, 1889
391,761	Nutting, S. E. -----	Oct. 23, 1888	404,351	Fox, J. R. -----	May 28, 1889
392,393	Young, J. C. -----	Nov. 6, 1888	11,002	Noble, C. B. (Reis. of 374,129.) -----	May 7, 1889
393,405	Turner, D. B. -----	Nov. 27, 1888	405,440	Sperry, E. A. -----	June 18, 1889
393,574	Paget, L. -----	Nov. 27, 1888			

176. ELECTRIC LIGHTING.—106. LIGHTS—ARC, GRAVITY FEED, GEAR-CLUTCH.

388,053	Killin, V. C. -----	Aug. 21, 1888	399,054	Lane, G. M. -----	Mar. 5, 1889
393,447	Pfannkuche, G. -----	Nov. 27, 1888	400,476	Nutting, S. E. -----	Apr. 2, 1889
398,906	Silvey, W. L. -----	Mar. 5, 1889	400,692	Lane, G. M. -----	Apr. 2, 1889
398,907	Silvey, W. L. -----	Mar. 5, 1889			

176. ELECTRIC LIGHTING.—107. LIGHTS—ARC, POSITIVE FEED.

385,705	Gaston, J. E. -----	July 10, 1888	403,964	Silvey, W. L. -----	May 28, 1889
391,477	Libbey, H. W. -----	Oct. 23, 1888			

176. ELECTRIC LIGHTING.—109. LIGHTS—ARC, POSITIVE FEED, GEAR-CLUTCH.

388,594	Spencer, L. W. and Jaquith, F. P. -----	Aug. 28, 1888	403,671	Houghton, D. -----	May 21, 1889
388,697	Lea, J. -----	Aug. 28, 1888	404,244	Atwood, La M. C. -----	May 28, 1889
394,791	Schefbauer, R. -----	Dec. 18, 1888	404,245	Atwood, La M. C. -----	May 28, 1889
400,198	Edwards, E. A. -----	Mar. 26, 1889	405,906	Pieper, H., fils. -----	June 25, 1889

176. ELECTRIC LIGHTING.—112. LIGHTS—ARC, SPECIAL FEATURES.

388,723	Schardt, B. and Jones, G. -----	Aug. 28, 1888	398,870	Wood, J. J. -----	Mar. 5, 1889
395,755	Pawlowski, J. -----	Jan. 8, 1889	399,786	Schardt, B. and Jones, G. -----	Mar. 19, 1889

176. ELECTRIC LIGHTING.—102. LIGHTS—FILAMENTS AND CARBONS.

388,757	Burns, J. -----	Aug. 28, 1888	401,120	Bottomo, T. D. -----	Apr. 9, 1889
390,310	Packard, J. W. -----	Oct. 2, 1888	401,606	Thompson, E. P. -----	Apr. 16, 1889
390,462	Edison, T. A. -----	Oct. 2, 1888	401,607	Thompson, E. P. -----	Apr. 16, 1889
391,815	Packard, J. W. -----	Oct. 30, 1888	404,112	Reinmann, A. L. and Lange, P. -----	May 28, 1889
391,816	Packard, J. W. -----	Oct. 30, 1888	404,118	Smith, F. S. -----	May 28, 1889
392,159	Lemp, H. -----	Oct. 30, 1888	404,463	Bottomo, T. D. -----	June 4, 1889
392,520	McTighe, J. J. -----	Nov. 6, 1888	405,170	Maxim, H. S. -----	June 11, 1889
393,391	Ram, G. S. -----	Nov. 27, 1888	405,239	Maxim, H. S. -----	June 11, 1889
395,963	Edison, T. A. -----	Jan. 8, 1889	405,480	Hughes, T. V. and Chambers, C. R. -----	June 18, 1889
397,754	Rheiner, H. S. -----	Feb. 12, 1889			

176. ELECTRIC LIGHTING.—18. LIGHTS—INCANDESCENT.

No.	NAME.	DATE.	No.	NAME.	DATE.
389,369	Edison, T. A.-----	Sept. 11, 1888	398,774	Edison, T. A.-----	Feb. 26, 1889
390,903	Reinmann, A. L.-----	Oct. 9, 1888	400,378	Weston, E.-----	Mar. 26, 1889
391,596	Edison, T. A.-----	Oct. 23, 1888	401,444	Lemp, H. and Wightman, M. J.-----	Apr. 16, 1889
392,158	Lemp, H.-----	Oct. 30, 1888	401,646	Edison, T. A.-----	Apr. 16, 1889
395,962	Edison, T. A.-----	Jan. 8, 1889	404,816	Backstrom, C. A.-----	June 11, 1889
397,479	Vandegrift, J. A.-----	Feb. 5, 1889			

176. ELECTRIC LIGHTING.—113. LIGHTS—INCANDESCENT—SPECIAL FEATURES.

397,218	Bergmann, S.-----	Feb. 5, 1889	401,417	Cox, C. W. and Van Dyke, T. E.-----	Apr. 16, 1889
399,497	Cassidy, J. C.-----	Mar. 12, 1889	402,420	Doubleday, H. M. and R.-----	Apr. 30, 1889
400,473	Moore, A. T., jr., and Fitch, H. A.-----	Apr. 2, 1889	405,742	Orford, J. M.-----	June 25, 1889
400,600	Rockwell, F. C.-----	Apr. 2, 1889	405,970	Pearson, J. T.-----	June 25, 1889

176. ELECTRIC LIGHTING.—98. LIGHTS—SOCKETS AND KEYS.

385,436	Adams, J. S. and Morrell, A. W.-----	July 3, 1888	396,583	Loomis, O. P.-----	Jan. 22, 1889
389,280	Bergmann, S.-----	Sept. 11, 1888	399,748	Egan, C. E.-----	Mar. 19, 1889
389,888	Heysinger, I. W.-----	Sept. 25, 1888	402,481	Rockwell, F. C.-----	Apr. 30, 1889
392,666	Coad, T.-----	Nov. 13, 1888	403,397	Stewart, J.-----	May 14, 1889
393,733	Wollin, W. F. and Werline, E. H.-----	Nov. 27, 1888			

176. ELECTRIC LIGHTING.—19. LIGHTING—SYSTEMS.

386,956	Belfield, R.-----	July 31, 1888	396,241	Shawhan, J. F.-----	Jan. 15, 1889
387,615	Brown, H. P.-----	Aug. 7, 1888	397,906	Galvin, J. A.-----	Feb. 19, 1889
387,932	Thompson, W. H.-----	Aug. 14, 1888	400,214	Horne, W. L.-----	Mar. 26, 1889
389,297	Griscom, W. W.-----	Sept. 11, 1888	401,486	Edison, T. A.-----	Apr. 16, 1889
389,753	Morrell, A. W.-----	Sept. 18, 1888	405,572	Loomis, O. P.-----	June 18, 1889
391,923	Slattery, M. M. M.-----	Oct. 30, 1888	405,895	Leonard, H. W.-----	June 25, 1889
395,215	Davies, D. H. and Tourtel, J. M.-----	Dec. 25, 1888	405,896	Leonard, H. W.-----	June 25, 1889
395,936	Wightman, M. J.-----	Jan. 8, 1889			

177. ELECTRIC SIGNALING.—1. ALARMS.

394,491	Johns, J. H.-----	Dec. 11, 1888	400,028	Woodring, W. H. and Gilbert, C. S.-----	Mar. 19, 1889
395,096	Watson, A.-----	Dec. 25, 1888			
397,657	Meyer, E.-----	Feb. 12, 1889	401,521	Walsh, E., jr.-----	Apr. 16, 1889
398,069	Nagle, A. F.-----	Feb. 19, 1889			

177. ELECTRIC SIGNALING.—2. ALARMS—BURGLAR.

388,433	Nutter, F. H.-----	Aug. 28, 1888	398,144	Geary, J.-----	Feb. 19, 1889
389,272	Weston, E.-----	Sept. 11, 1888	398,420	McCarthy, L. A.-----	Feb. 26, 1889
393,657	Packer, R. and Cochran, I. E., jr.-----	Nov. 27, 1888	400,239	McKinney, J. Y.-----	Mar. 26, 1889
396,667	Robbins, A. C.-----	Jan. 22, 1889	401,789	Nutter, F. H.-----	Apr. 23, 1889
396,701	Lehy, G. B.-----	Jan. 22, 1889			

177. ELECTRIC SIGNALING.—3. ANNUNCIATORS.

385,357	Kelly, J. E.-----	July 3, 1888	394,081	Patten, F. J. and Bingham, T. A.-----	Dec. 4, 1888
385,894	Wood, M. M.-----	July 10, 1888	394,555	Clark, W. C.-----	Dec. 18, 1888
386,597	McLaughlin, J. F.-----	July 24, 1888	396,795	Young, J.-----	Jan. 29, 1889
388,344	Dey, C. E.-----	Aug. 21, 1888	397,364	Holcombe, A. G.-----	Feb. 5, 1889
388,837	Crockett, C. H. and Allen, C. C.-----	Sept. 4, 1888	400,050	Bunker, I. S.-----	Mar. 26, 1889
388,876	Humans, W.-----	Sept. 4, 1888	400,304	Colby, E. J.-----	Mar. 26, 1889
390,833	Barrett, A. and Zentner, J.-----	Oct. 9, 1888	400,750	Cox, C. A. and J. F.-----	Apr. 2, 1889
391,276	Sax, J.-----	Oct. 16, 1888	400,951	Robinson, M.-----	Apr. 9, 1889
392,766	Trafford, W.-----	Nov. 13, 1888	400,985	Willis, J. B.-----	Apr. 9, 1889
392,970	Ritchie, F.-----	Nov. 13, 1888	402,043	Stuart, J. M.-----	Apr. 23, 1889
393,078	Rossbach, W. F.-----	Nov. 20, 1888	402,626	Smead, B.-----	May 7, 1889

177. ELECTRIC SIGNALING.—7. BELLS.

No.	NAME.	DATE.	No.	NAME.	DATE.
388,836	Crane, M. G.-----	Sept. 4, 1888	393,998	McLaughlin, J. F.-----	Dec. 4, 1888
389,080	Humans, W.-----	Sept. 4, 1888	401,296	Noyes, J. G.-----	Apr. 9, 1889
389,423	Tirrell, J. P.-----	Sept. 11, 1888	402,165	Kinsey, I.-----	Apr. 30, 1889
391,547	Milliken, G. F.-----	Oct. 23, 1888	402,613	Rainey, W. K.-----	May 7, 1889
393,710	Lüngren, A.-----	Nov. 27, 1888	402,960	Moffatt, R. R.-----	May 7, 1889

177. ELECTRIC SIGNALING.—26. INDICATORS.

386,189	Delany, P. B.-----	July 17, 1888	395,783	Hollerith, H.-----	Jan. 8, 1889
388,690	Kirwan, G. H.-----	Aug. 28, 1888	395,862	Winslow, G. E.-----	Jan. 8, 1889
391,568	Waters, B. E.-----	Oct. 23, 1888	398,713	Enos, J. A.-----	Feb. 26, 1889
394,520	Thornycroft, J. I.-----	Dec. 11, 1888	399,163	Ricketson, J. C.-----	Mar. 5, 1889
395,781	Hollerith, H.-----	Jan. 8, 1889	404,866	Ricketson, J. C.-----	June 11, 1889
395,782	Hollerith, H.-----	Jan. 8, 1889	404,867	Ricketson, J. C.-----	June 11, 1889

177. ELECTRIC SIGNALING.—38. RAILWAY-SIGNALS.

385,363	Martel, A. F.-----	July 3, 1888	397,270	Boda, A. Z.-----	Feb. 5, 1889
385,677	Martel, A. F.-----	July 3, 1888	398,613	Hayden, H., jr. and Desant, W. F. Z.-----	Feb. 26, 1889
385,920	De Redon, C. F.-----	July 10, 1888	399,155	Palmer, H. J.-----	Mar. 5, 1889
385,964	Sharp, E. A.-----	July 10, 1888	399,331	Hull, W. S. and Anderson, J. C.-----	Mar. 12, 1889
386,049	Wright, G. H.-----	July 10, 1888	399,474	Benjamin, F. P.-----	Mar. 12, 1889
387,316	Orcutt, E. L.-----	Aug. 7, 1888	399,556	Putnam, T. A. B.-----	Mar. 12, 1889
387,365	Orcutt, E. L.-----	Aug. 7, 1888	399,579	Stitzel, F. and Weinedel, C.-----	Mar. 12, 1889
389,122	Turner, W. A.-----	Sept. 4, 1888	400,525	Waddell, W. H.-----	Apr. 2, 1889
389,226	Irwin, J.-----	Sept. 11, 1888	400,880	Street, S. T.-----	Apr. 2, 1889
392,443	Long, M. W.-----	Nov. 6, 1888	401,472	Taylor, T.-----	Apr. 16, 1889
392,444	Long, M. W.-----	Nov. 6, 1888	401,591	Riesenberg, H.-----	Apr. 16, 1889
393,431	Griggs, A. C.-----	Nov. 27, 1888	401,664	Steenbergh, G. C.-----	Apr. 16, 1889
393,865	Stitzel, F. and Weinedel, C.-----	Dec. 4, 1888	402,506	Carter, J. T.-----	Apr. 30, 1889
395,163	Meloon, I. L. and Whiting, P. S.-----	Dec. 25, 1888	402,562	Coleman, J. P.-----	May 7, 1889
395,315	Coleman, J. P.-----	Jan. 1, 1889	403,180	De Mier, J. R.-----	May 14, 1889
395,667	Smith, D. G.-----	Jan. 1, 1889	403,515	Casey, T. A.-----	May 21, 1889
396,207	Henion, W.-----	Jan. 15, 1889	403,619	Steenbergh, G. C.-----	May 21, 1889
396,365	Paul, W. C. and Kleinstenuber, O. D.-----	Jan. 15, 1889	404,170	Coleman, J. P.-----	May 28, 1889
396,748	Kookogey, W. P.-----	Jan. 29, 1889	404,457	Wisner, A. J.-----	June 4, 1889
396,749	Kookogey, W. P.-----	Jan. 29, 1889	405,519	Wuerpel, M.-----	June 18, 1889
396,750	Kookogey, W. P.-----	Jan. 29, 1889	405,815	White, J. C.-----	June 25, 1889

177. ELECTRIC SIGNALING.—39. RECORDERS.

389,273	Weston, E.-----	Sept. 11, 1888	402,120	Wilson, J. C.-----	Apr. 23, 1889
392,838	Wilson, J. C.-----	Nov. 13, 1888	402,928	Holcomb, F. A.-----	May 7, 1889

178. TELEGRAPHY.—46. AUTOMATIC.

386,059	Cuttriss, C.-----	July 10, 1888	399,154	O'Neil, J.-----	Mar. 5, 1889
386,814	Gray, E.-----	July 31, 1888	402,414	Dewey, M. W.-----	Apr. 30, 1889
386,815	Gray, E.-----	July 31, 1888	402,415	Dewey, M. W.-----	Apr. 30, 1889
389,883	Field, S. D.-----	Sept. 25, 1888	405,539	Dewey, M. W.-----	June 18, 1889
394,960	Dewey, M. W.-----	Dec. 25, 1888	405,984	Burke, C. G.-----	June 25, 1889
395,427	Delany, P. B.-----	Jan. 1, 1889	405,986	Burke, C. G.-----	June 25, 1889
397,977	Dressler, C. E.-----	Feb. 19, 1889			

178. TELEGRAPHY.—10. CIRCUIT-CLOSERS.

390,329	Willatowsky, A. F. L.-----	Oct. 2, 1888	399,057	Lecoultrre, I. E.-----	Mar. 5, 1889
390,778	Harris, P. A.-----	Oct. 9, 1888	400,232	Lehman, J. H.-----	Mar. 26, 1889
391,855	Ongley, C. E.-----	Oct. 30, 1888	400,235	Liebert, E. and Rosenthal, S. A.-----	Mar. 26, 1889
391,917	Randall, J. D.-----	Oct. 30, 1888	401,035	Kaselowsky, E.-----	Apr. 9, 1889
393,558	Harms, C. F.-----	Nov. 27, 1888	402,828	Hopkins, G. I.-----	May 7, 1889
394,164	Farmer, J. S.-----	Dec. 11, 1888	404,033	Currier, H. L.-----	May 28, 1889
394,925	Hoyt, A. J.-----	Dec. 18, 1888	405,525	Braun, C. A.-----	June 18, 1889
397,838	Denio, W. L.-----	Feb. 12, 1889			

178. TELEGRAPHY.—45. CIRCUITS AND SYSTEMS.

No.	NAME.	DATE.	No.	NAME.	DATE.
388,008	Ader, C -----	Aug. 21, 1888	399,314	Burnley, W -----	Mar. 12, 1889
388,481	Delany, P. B. -----	Aug. 28, 1888	401,334	Delany, P. B. -----	Apr. 16, 1889
389,062	Delany, P. B. -----	Sept. 4, 1888	402,298	Burnley, W -----	Apr. 30, 1889
390,802	Patten, F. J. -----	Oct. 9, 1888	403,292	Robertson, J. H. -----	May 14, 1889
394,961	Dewey, M. W. -----	Dec. 25, 1888	404,165	Burly, J -----	May 28, 1889
398,035	Dieuleveult, U -----	Feb. 19, 1889	405,985	Burke, C. G. -----	June 25, 1889

178. TELEGRAPHY.—12. CONDENSERS.

400,866	Marshall, W -----	Apr. 2, 1889	402,027	Marshall, W -----	Apr. 23, 1889
---------	-------------------	--------------	---------	-------------------	---------------

178. TELEGRAPHY.—49. DYNAMO.

398,614	Healy, C. L -----				Feb. 26, 1889
---------	-------------------	--	--	--	---------------

178. TELEGRAPHY.—103. FIRE—ALARMS AND EXTINGUISHERS.

387,265	Stuckert, J. F. -----	Aug. 7, 1888	395,112	Barnes, W. A -----	Dec. 25, 1888
388,357	Guest, J. H. -----	Aug. 21, 1888	396,385	Arbogast, C. and Kunzler, J. W. -----	Jan. 22, 1889
394,839	Denio, W. L. -----	Dec. 18, 1888	397,171	Crosby, E. H. -----	Feb. 5, 1889
395,111	Barnes, W. A -----	Dec. 25, 1888	399,738	Cannan, J. J. -----	Mar. 19, 1889

178. TELEGRAPHY.—50. FIRE.

385,388	Thompson, W. C. -----	July 3, 1888	395,958	Dewey, M. W. -----	Jan. 8, 1889
386,175	Wilson, J. C. -----	July 17, 1888	395,959	Dewey, M. W. -----	Jan. 8, 1889
386,772	Davis, E. -----	July 24, 1888	396,450	Zoeller, T. J. -----	Jan. 22, 1889
387,585	Dudley, W. J. -----	Aug. 7, 1888	397,194	Martin, M. -----	Feb. 5, 1889
388,358	Gnest, J. H. -----	Aug. 21, 1888	400,264	Sperry, E. A. -----	Mar. 26, 1889
388,631	Chase, S. A. -----	Aug. 28, 1888	402,507	Chase, S. A. -----	Apr. 30, 1889
389,678	Turner, T. G. -----	Sept. 18, 1888	402,642	Young, J. -----	May 7, 1889
389,839	Dubinski, B. -----	Sept. 18, 1888	402,986	Shafer, E. B. -----	May 7, 1889
392,604	Hale, G. C., Barrett, A. and Zentner, J. -----	Nov. 13, 1888	404,226	Robbins, A. C. -----	May 28, 1889
392,641	Slocum, E. L. -----	Nov. 13, 1888	404,438	Ruddick, J. J. -----	June 4, 1889
392,832	Talbot, C. N. -----	Nov. 13, 1888	404,518	Chase, S. A. -----	June 4, 1889
394,784	Milliken, G. F. -----	Dec. 18, 1888	404,519	Chase, S. A. -----	June 4, 1889
395,101	Wilson, J. C. -----	Dec. 25, 1888	405,235	Wilson, J. C. -----	June 11, 1889
395,102	Wilson, J. C. -----	Dec. 25, 1888	405,831	Dewey, M. W. -----	June 25, 1889

178. TELEGRAPHY.—30. LIGHTNING ARRESTERS.

387,051	Cheney, F. A. -----	July 31, 1888	401,085	Thomson, E. -----	Apr. 9, 1889
397,418	Crandall, J. E. -----	Feb. 5, 1889	404,154	Belfield, R. -----	May 28, 1889
400,463	Law, M. D. -----	Apr. 2, 1889			

178. TELEGRAPHY.—29. KEYS.

386,729	Townsend, L. and Auten, J. E. -----	July 24, 1888	405,621	Taylor, C. W. -----	June 18, 1889
390,642	Bennett, J. B. -----	Oct. 9, 1888			

178. TELEGRAPHY.—51. MULTIPLEX.

392,914	Field, S. D. -----	Nov. 13, 1888	395,510	Patten, F. J. -----	Jan. 1, 1889
395,508	Patten, F. J. -----	Jan. 1, 1889	395,556	Field, S. D. -----	Jan. 1, 1889
395,509	Patten, F. J. -----	Jan. 1, 1889	396,734	Dewey, M. W. -----	Jan. 29, 1889

178. TELEGRAPHY.—54. PRINTING.

No.	NAME.	DATE.	No.	NAME.	DATE.
385,565	McLaughlin, J. F -----	July 3, 1888	394,302	Sheffield, G. V -----	Dec. 11, 1888
386,646	McLaughlin, J. F -----	July 24, 1888	395,614	Dewey, M. W -----	Jan. 1, 1889
388,140	McLaughlin, J. F -----	Aug. 21, 1888	397,466	McCoy, A. T -----	Feb. 5, 1889
388,141	McLaughlin, J. F -----	Aug. 21, 1888	398,833	Higgins, F. H. W -----	Mar. 5, 1889
388,142	McLaughlin, J. F -----	Aug. 21, 1888	402,099	Munier, C. J. A -----	Apr. 23, 1889
388,143	McLaughlin, J. F -----	Aug. 21, 1888	403,472	Hotchkiss, Z. P -----	May 14, 1889
388,244	Baudot, J. M. E -----	Aug. 21, 1888	404,426	Oehmen, G. T -----	June 4, 1889
389,142	Fiske, B. A -----	Sept. 4, 1888			

178. TELEGRAPHY.—55. QUADRUPLIX.

405,211	Haskins, C. D -----	June 11, 1889
---------	---------------------	---------------

178. TELEGRAPHY.—56. RAILWAY-CAR.

386,541	Ives, E. B -----	July 24, 1888	397,049	Cade, B -----	Jan. 29, 1889
388,803	Woods, G. T -----	Aug. 28, 1888	399,228	Hopkins, G. I -----	Mar. 5, 1889
388,869	Hill, H. T -----	Sept. 4, 1888	402,408	Crouch, F. J -----	Apr. 30, 1889
396,983	Cade, B -----	Jan. 29, 1889			

178. TELEGRAPHY.—63. REED.

388,091	Van Rysselberghe, F -----	Aug. 21, 1888	395,613	Dewey, M. W -----	Jan. 1, 1889
388,092	Van Rysselberghe, F -----	Aug. 21, 1888	400,523	Van Rysselberghe, F -----	Apr. 2, 1889
388,333	Barnard, W. T -----	Aug. 21, 1888	403,258	Field, S. D -----	May 14, 1889

178. TELEGRAPHY.—41. RELAYS AND SOUNDERS.

389,337	Stitzel, F. and Weinedel, C ----	Sept. 11, 1888	403,626	Van Epps, F. L -----	May 21, 1889
394,697	Jamieson, P. F -----	Dec. 18, 1888	405,987	Burke, C. G -----	June 25, 1889
396,465	Carey, G. H. and MacArthur, W	Jan. 22, 1889	405,988	Burke, C. G -----	June 25, 1889
402,639	Wilson, J. C -----	May 7, 1889	405,989	Burke, C. G -----	June 25, 1889
402,717	Burke, C. G -----	May 7, 1889			

178. TELEGRAPHY.—69. TRANSMITTERS.

386,129	Hotchkiss, Z. P -----	July 17, 1888	402,929	Holcomb, F. A -----	May 7, 1889
400,141	Stoue, R. C -----	Mar. 26, 1889	404,507	Shafer, E. B -----	June 4, 1889

179. TELEPHONY.—82. ANTI-INDUCTION DEVICES.

393,165	Lockwood, T. D -----	Nov. 20, 1888	399,377	Carty, J. J -----	Mar. 12, 1889
397,331	Barrett, J. A -----	Feb. 5, 1889	402,810	Denver, W. J -----	May 7, 1889

179. TELEPHONY.—81. CONDUCTORS—ANTI-INDUCTIVE.

392,103	Campbell, H. F -----	Oct. 30, 1888	403,262	Garland, E. F -----	May 14, 1889
392,775	Barrett, J. A -----	Nov. 13, 1888			

179. TELEPHONY.—57. TELEPHONES—CALLS.

390,058	Bernheim, F. I -----	Sept. 25, 1888	399,505	Dudley, W. J -----	Mar. 12, 1889
391,839	Davis, E -----	Oct. 30, 1888	400,326	Ginochio, N. B -----	Mar. 26, 1889
394,946	Wood, J. B -----	Dec. 18, 1888	403,104	Hatch, A. A -----	May 14, 1889
397,176	Ferdinand, A. B -----	Feb. 5, 1889	403,776	Pope, E -----	May 21, 1889
397,284	Griffith, A. and Burbank, H. A	Feb. 5, 1889	405,420	Konigsfrow, H -----	June 18, 1889

179. TELEPHONY.—58. TELEPHONES—DETAILS.

No.	NAME.	DATE.	No.	NAME.	DATE.
401,732	Candee, W. L-----	Apr. 23, 1889	404,471	Drake, E. S-----	June 4, 1889

179. TELEPHONY.—59. TELEPHONES—ELECTRIC.

385,664	Emmner, J., jr-----	July 3, 1888	391,356	Collins, W. H-----	Oct. 16, 1888
385,956	Parks, N-----	July 10, 1888	395,476	Blake, F-----	Jan. 1, 1889
386,380	Brown, C. W-----	July 17, 1888	399,666	Hitchcock, C. A-----	Mar. 19, 1889
386,965	Cole, W. R-----	July 31, 1888	400,591	Morton, W. J-----	Apr. 2, 1889
388,242	Barney, W. C-----	Aug. 21, 1888	401,743	Gillett, W-----	Apr. 23, 1889
390,575	D'Unger, R-----	Oct. 2, 1888			

179. TELEPHONY.—60. TELEPHONES—MAGNETIC.

400,325	Ginochio, N. B-----				Mar. 26, 1889
---------	---------------------	--	--	--	---------------

179. TELEPHONY.—77. RELAYS AND REPEATERS.

390,428	Wright, P-----				Oct. 2, 1888
---------	----------------	--	--	--	--------------

179. TELEPHONY.—100. TELEPHONES—SUPPORTS.

387,718	Hartwell, N. W-----	Aug. 14, 1888	403,316	Adams, S. J-----	May 14, 1889
392,843	Bergmann, S-----	Nov. 13, 1888	404,680	Brown, C. W-----	June 4, 1889
400,520	Tuttle, C. R-----	Apr. 2, 1889	405,566	Konigslow, O-----	June 18, 1889
400,911	Hall, P. E-----	Apr. 9, 1889	405,677	Pickernell, F. A-----	June 18, 1889

179. TELEPHONY.—85. TELEPHONES—SWITCH-BOARDS.

385,846	Cook, J. A-----	July 10, 1888	399,269	Kelly, J. W-----	Mar. 12, 1889
393,824	Goodridge, W. M-----	Dec. 4, 1888	401,067	Reilly, J. C-----	Apr. 9, 1889
394,964	Farnham, I. H-----	Dec. 25, 1888			

179. TELEPHONY.—71. TELEPHONES—SWITCHES.

394,173	Griffith, A. and Burbank, H. A-----	Dec. 11, 1888	405,382	Stromberg, A-----	June 18, 1889
402,121	Woelk, E. A-----	Apr. 23, 1889			

179. TELEPHONY.—64. TELEPHONES—SYSTEMS.

385,482	Scribner, C. E-----	July 3, 1888	392,326	Gould, C. C-----	Nov. 6, 1888
385,528	Scribner, C. E-----	July 3, 1888	392,403	Blake, F-----	Nov. 6, 1888
385,863	Kellogg, M. G-----	July 10, 1888	393,243	Ker, J. B. and Crawford, J-----	Nov. 20, 1888
385,974	Vail, T. N-----	July 10, 1888	393,508	Kellogg, M. G-----	Nov. 27, 1888
385,975	Vail, T. N-----	July 10, 1888	393,509	Kellogg, M. G-----	Nov. 27, 1888
385,976	Vail, T. N-----	July 10, 1888	393,529	Vansize, W. B-----	Nov. 27, 1888
385,977	Vail, T. N-----	July 10, 1888	393,612	Brown, C. W-----	Nov. 27, 1888
385,978	Vail, T. N-----	July 10, 1888	394,195	Maxwell, G. S-----	Dec. 11, 1888
386,886	Kellogg, M. G-----	July 31, 1888	394,230	Vail, T. N. and Seely, J. A-----	Dec. 11, 1888
386,887	Kellogg, M. G-----	July 31, 1888	394,832	Casey, J. F-----	Dec. 18, 1888
387,645	Kellogg, M. G-----	Aug. 14, 1888	394,833	Casey, J. F-----	Dec. 18, 1888
387,888	Kellogg, M. G-----	Aug. 14, 1888	394,914	Durant, G. F. and Bailey, H. L-----	Dec. 18, 1888
387,889	Kellogg, M. G-----	Aug. 14, 1888	394,951	Balsley, U. H-----	Dec. 25, 1888
387,890	Kellogg, M. G-----	Aug. 14, 1888	395,137	Hayes, H. V-----	Dec. 25, 1888
388,052	Kellogg, M. G-----	Aug. 21, 1888	10,989	Vansize, W. B.—(Reis. of 393,529)	Mar. 5, 1889
388,283	Kellogg, M. G-----	Aug. 21, 1888	400,969	Thayer, H. B-----	Apr. 9, 1889
388,453	Scribner, C. E-----	Aug. 28, 1888	402,264	McCluer, C. E-----	Apr. 30, 1889
388,454	Scribner, C. E-----	Aug. 28, 1888	403,291	Robertson, J. H-----	May 14, 1889
388,791	Scribner, C. E-----	Aug. 28, 1888	403,458	Carty, J. J-----	May 14, 1889
388,922	Sheehy, R. J-----	Sept. 4, 1888	403,483	O'Connell, J. J-----	May 14, 1889
391,762	Scribner, C. E-----	Oct. 23, 1888	405,221	McKivitt, W. E-----	June 11, 1889
392,033	Jacques, W. W-----	Oct. 30, 1888	405,461	Burbank, H. L-----	June 18, 1889
392,248	Wilson, J. C-----	Nov. 6, 1888	405,867	Beach, F. G-----	June 25, 1889
392,301	Bailey, R. M-----	Nov. 6, 1888			

1. AERATION AND BOTTLING.—10. SODA-WATER APPARATUS.

No.	NAME.	DATE.	No.	NAME.	DATE.
394,834	Cleeve, H. F. and Parker, J				Dec. 18, 1888

2. APPAREL.—4. CUTTING.

391,235	Warth, A				Oct. 16, 1888
---------	----------	--	--	--	---------------

9. BOATS.—3. BUOYS AND SAFES.

395,187	Smith, W. B				Dec. 25, 1888
---------	-------------	--	--	--	---------------

14. BRIDGES.—3. GIRDERS AND COLUMNS.

393,040	Thomson, E	Nov. 20, 1888	404,232	Snead, U	May 28, 1889
---------	------------	---------------	---------	----------	--------------

14. BRIDGES.—10. TOWERS.

390,001	Brown, L. W				Sept. 25, 1888
---------	-------------	--	--	--	----------------

16. BUILDERS' HARDWARE.—20. BOLTS.

388,229	Thode, C. W. F				Aug. 21, 1888
---------	----------------	--	--	--	---------------

21. CARRIAGES AND WAGONS.—65. TRUCKS.

402,890	Bemis, S. A. and Pfingst, L				May 7, 1889
---------	-----------------------------	--	--	--	-------------

18. CAOUTCHOUC AND MINOR PLASTICS.—3. CELLULOID.

393,751	France, J. R	Dec. 4, 1888	393,752	France, J. R	Dec. 4, 1888
---------	--------------	--------------	---------	--------------	--------------

18. CAOUTCHOUC AND MINOR PLASTICS.—7. MISCELLANEOUS COMPOSITIONS.

393,838	Kiel, W	Dec. 4, 1888	335,033	Siemens, W	Dec. 25, 1888
---------	---------	--------------	---------	------------	---------------

18. CAOUTCHOUC AND MINOR PLASTICS.—11. INSULATING MATERIALS.

386,925	Lee, C. T	July 31, 1888	393,644	Hermann, S	Nov. 27, 1888
393,029	Poitevent, A	Nov. 20, 1888	401,014	De Figanère, A	Apr. 9, 1889

23. CHEMICALS.—10. METALLOIDS.

397,992	Merkel, G. H				Feb. 19, 1889
---------	--------------	--	--	--	---------------

23. CHEMICALS.—13. SALINES.

393,578	Paget, L				Nov. 27, 1888
---------	----------	--	--	--	---------------

23. CHEMICALS.—26. PURIFYING WATER.

386,073	Jewell, O. H	July 10, 1888	387,467	Webster, W., jr	Aug. 7, 1888
---------	--------------	---------------	---------	-----------------	--------------

23. CHEMICALS.—27. ELECTROLYSIS.

No.	NAME.	DATE.	No.	NAME.	DATE.
397,407	Webster, W., jr -----	Feb. 5, 1889	398,101	Webster, W., jr -----	Feb. 19, 1889

28. CORDAGE.—14. WARPING.

395,851	Schwartz, L. H. A. -----	Jan. 8, 1889
---------	--------------------------	--------------

28. CORDAGE.—16. WINDING BOBBINS—WEFT-WIND.

393,887	Couche, J -----	Dec. 4, 1888
---------	-----------------	--------------

32. DENTISTRY.—5. MISCELLANEOUS.

404,745	Taylor, E. C -----	June 4, 1889
---------	--------------------	--------------

39. FENCES.—12. WIRE-FASTENERS.

401,243	Gildemeyer, C. A -----	Apr. 16, 1889
---------	------------------------	---------------

39. FENCES.—38. RAILWAY GATES—ELECTRIC.

*397,880	Toulmin, M -----	Feb. 12, 1889
----------	------------------	---------------

40. ADVERTISING.—2. AUTOMATIC DEVICES.

395,151	Laurence, A -----	Dec. 25, 1888	398,276	Pierce, A. M -----	Feb. 19, 1889
---------	-------------------	---------------	---------	--------------------	---------------

40. ADVERTISING.—12. SHOW-BOXES AND CARDS.

393,402	Smith, A. C -----	Nov. 27, 1888
---------	-------------------	---------------

40. ADVERTISING.—14. SIGNS.

395,317	Dubey, E. A -----	Jan. 1, 1889	402,683	Manning, C. E -----	May 7, 1889
---------	-------------------	--------------	---------	---------------------	-------------

41. FINE ARTS.—17. THEATRICAL APPLIANCES.

397,678	Wilson, F -----	Feb. 12, 1889
---------	-----------------	---------------

46. GAMES AND TOYS.—20. GAME APPARATUS.

400,011	Rogers, T. B. and Bartlett, S. H -----	Mar. 19, 1889
---------	--	---------------

57. HOISTING.—22. CAPSTANS AND WINDLASSES.

403,164	Wiest, J -----	May 14, 1889
---------	----------------	--------------

58. HOROLOGY.—3. CLOCKS.

404,906	Hadlock, W. E -----	June 11, 1889
---------	---------------------	---------------

58. HOROLOGY.—15. TIME ALARMS.

No.	NAME.	DATE.	No.	NAME.	DATE.
398,896 403,100	Kahan, S. and Craven, A. W.----- Grady, T. H.-----	Mar. 5, 1889 May 14, 1889	405,206	Dubinski, B.-----	June 11, 1889

58. HOROLOGY.—16. TIME CHECKS.

386,767 389,626	Bulen, G. F.----- Wirsehing, A.-----	July 24, 1888 Sept. 18, 1888	394,049 400,283	Bassford, W. K. and Maynard, E. B. Adams, H. R.-----	Dec. 4, 1888 Mar. 26, 1889
--------------------	---	---------------------------------	--------------------	--	-------------------------------

58. HOROLOGY.—20. WATCH CASES.

403,211	Pratt, H. P.-----	May 14, 1889
---------	-------------------	--------------

58. HOROLOGY.—28. CLOCKS—ELECTRIC.

386,103 387,276 387,703 387,704 387,974 388,622 390,230 391,446 391,969 392,230	Bohmeyer, C.----- Wieseman, A. G.----- Warner, C. D.----- Warner, C. D.----- Hexamer, C. J.----- Brainerd, F. W.----- Hoefling, C. E.----- Wiseman, A. G.----- Himmer, V.----- Scales, W. S.-----	July 17, 1888 Aug. 7, 1888 Aug. 14, 1888 Aug. 14, 1888 Aug. 14, 1888 Aug. 28, 1888 Oct. 2, 1888 Oct. 23, 1888 Oct. 30, 1888 Nov. 6, 1888	393,159 393,637 395,357 399,128 401,006 401,065 402,329 402,823 405,089	Kronenberg, E.----- Gerry, J. H.----- Scales, W. S.----- Brainerd, F. W.----- Carranza, M. and Tinoeo, J. M.----- Rabe, H.----- Jansen, A. M. J. and V. J. A. M.----- Hammer, E. G.----- Gerry, J. H.-----	Nov. 20, 1888 Nov. 27, 1888 Jan. 1, 1889 Mar. 5, 1889 Apr. 9, 1889 Apr. 9, 1889 Apr. 30, 1889 May 7, 1889 June 11, 1889
--	--	---	---	--	---

62. REFRIGERATION.—10. REFRIGERATORS.

396,933	Hulford, W. J.-----	Jan. 29, 1889
---------	---------------------	---------------

64. JOURNAL BOXES, PULLEYS, AND SHAFTING.—4. BELT-SHIFTERS.

395,201	Barber, A. M. and Gabriel, C.-----	Dec. 25, 1888
---------	------------------------------------	---------------

64. JOURNAL BOXES, PULLEYS, AND SHAFTING.—13. SHAFT COUPLINGS.

388,415	Hewins, E. H.-----	Aug. 28, 1888
---------	--------------------	---------------

66. KNITTING AND NETTING—CIRCULAR.—2. CIRCULAR MACHINES.

386,636	Jones, L., jr.-----	July 24, 1888
---------	---------------------	---------------

66. KNITTING AND NETTING.—7. STOPPING.

387,672 390,891	Yarwood, M. C.----- Newlands, A. M.-----	Aug. 14, 1888 Oct. 9, 1888	397,537	Conner, E. G.-----	Feb. 12, 1889
--------------------	---	-------------------------------	---------	--------------------	---------------

67. LAMPS AND GAS FITTINGS.—5. DROP LIGHTS AND HANGERS.

385,493 392,228 394,153 394,680	Wood, J. J.----- Russell, C. W.----- Chisholm, D. J.----- Dawes, A.-----	July 3, 1888 Nov. 6, 1888 Dec. 11, 1888 Dec. 18, 1888	396,897 397,953 399,334 401,304	Siegrist, A.----- Wood, M. M.----- Keller, C. M.----- Russell, C. W. and Drake, J. I.-----	Jan. 29, 1889 Feb. 19, 1889 Mar. 12, 1889 Apr. 9, 1889
--	---	--	--	---	---

67. LAMPS AND GAS FITTINGS.—8. GAS FITTINGS.

400,658	Gennert, E. F.-----	Apr. 2, 1889
---------	---------------------	--------------

67. LAMPS AND GAS FITTINGS.—13. LAMP CHIMNEYS.

No.	NAME.	DATE.	No.	NAME.	DATE.
393,704	Heimann, S.-----				Nov. 27, 1888

67. LAMPS AND GAS FITTINGS.—22. LAMP SHADES.

387,044	Brady, T. H.-----	July 31, 1888	390,846	Downing, W. W.-----	Oct. 9, 1888
389,526	Moore, F.-----	Sept. 11, 1888	396,146	Dean, G. H.-----	Jan. 15, 1889
390,440	Brady, T. H.-----	Oct. 2, 1888	405,427	Melaney, W. H.-----	June 18, 1889

67. LAMPS AND GAS FITTINGS.—25. LIGHTING DEVICES.

388,177	Bridewell, R. F.-----				Aug. 21, 1888
---------	-----------------------	--	--	--	---------------

67. LAMPS AND GAS FITTINGS.—32. LAMPS.

400,140	Stockly, G. W.-----				Mar. 26, 1889
---------	---------------------	--	--	--	---------------

67. LAMPS AND GAS FITTINGS.—40. GAS EXTINGUISHERS.

393,271	Shaw, N. H.-----				Nov. 20, 1888
---------	------------------	--	--	--	---------------

67. LAMPS AND GAS FITTINGS.—46. LANTERNS—SUB-MARINE.

404,390	Dutton, A. L.-----				June 4, 1889
---------	--------------------	--	--	--	--------------

67. LAMPS AND GAS FITTINGS.—51. GAS BURNERS—INCANDESCENT.

335,393	Weisser, T.-----				July 3, 1888
---------	------------------	--	--	--	--------------

68. LAUNDRY.—3. CLOTHES LINES.

335,686	Wailles, J. S.-----				July 3, 1888
---------	---------------------	--	--	--	--------------

71. FERTILIZERS.—8. SEWAGE AND NIGHT SOIL.

337,286	Fewson, H.-----	Aug. 7, 1888	389,781	Webster, W.-----	Sept. 18, 1888
---------	-----------------	--------------	---------	------------------	----------------

72. MASONRY.—2. STONE AND BRICK SETTING.

393,477	Lake, W.-----				Nov. 27, 1888
---------	---------------	--	--	--	---------------

73. MEASURING INSTRUMENTS.—3. BALANCES.

391,831	Amet, E. H.-----				Oct. 30, 1888
---------	------------------	--	--	--	---------------

73. MEASURING INSTRUMENTS.—5. BATHOMETERS.

339,123	Vigil, I. and Revueltas, J. N.-----				Sept. 4, 1888
---------	-------------------------------------	--	--	--	---------------

73. MEASURING INSTRUMENTS.—15. DYNAMOMETERS.

397,295	Kearney, J. G.-----				Feb. 5, 1889
---------	---------------------	--	--	--	--------------

73. MEASURING INSTRUMENTS.—19. GRAIN METERS.

No.	NAME.	DATE.	No.	NAME.	DATE.
397,594	Holley, W. A. and Malin, W	-----			Feb. 12, 1889

73. MEASURING INSTRUMENTS.—28. OSCILLATING METERS.

394,562	Dutton, C. N	-----			Dec. 18, 1888
---------	--------------	-------	--	--	---------------

73. MEASURING INSTRUMENTS.—34. RECORDERS.

385,900	Amet, E. H	July 10, 1888	392,531	Amet, E. H	Nov. 6, 1888
387,842	Amet, E. H	Aug. 14, 1888			

73. MEASURING INSTRUMENTS.—35. REGISTERS.

396,786	Wagner, G. G	Jan. 29, 1889	401,518	Ross, H. S.	Apr. 16, 1889
---------	--------------	---------------	---------	-------------	---------------

73. MEASURING INSTRUMENTS.—38. SACK SCALES.

399,192	Gill, O. A	-----			Mar. 5, 1889
---------	------------	-------	--	--	--------------

73. MEASURING INSTRUMENTS.—46. SPRING SCALES.

392,698	Smith, W. R. and Washburn, A. L.	Nov. 13, 1888	398,519	Lynde, F. C	Feb. 26, 1889
393,325	Favre, J. C. J. C	Nov. 20, 1888	398,520	Lynde, F. C	Feb. 26, 1889
			398,521	Lynde, F. C	Feb. 26, 1889

73. MEASURING INSTRUMENTS.—51. TESTING MACHINES.

399,549	Olsen, T	-----			Mar. 12, 1889
---------	----------	-------	--	--	---------------

73. MEASURING INSTRUMENTS.—52. THERMOMETERS.

401,348	Haight, H. J	-----			Apr. 16, 1889
---------	--------------	-------	--	--	---------------

73. MEASURING INSTRUMENTS.—65. THERMOSTATS.

386,828	Johuson, C. W	July 31, 1888	394,413	Soley, W. H	Dec. 11, 1888
388,505	Petit, H. S. and Bresson, H. S.	Aug. 28, 1888	394,563	Easton, L. F	Dec. 18, 1888
389,096	Newman, E. A	Sept. 4, 1888	395,748	Kent, J. W. and Orr, R	Jan. 8, 1889
389,098	Newman, E. A	Sept. 4, 1888	400,312	Davis, E. H. and Westervelt, R.	Mar. 26, 1889
389,099	Newman, E. A	Sept. 4, 1888	400,917	Iwanowski, A. C	Apr. 9, 1889
389,100	Newman, E. A	Sept. 4, 1888	401,200	Norris, W. E	Apr. 9, 1889
390,281	Butz, A. M	Oct. 2, 1888	402,347	Patterson, W. R	Apr. 30, 1889
391,783	Connelly, W. A	Oct. 30, 1888	403,484	Patterson, W. R	May 14, 1889
394,220	Sparrow, F. M	Dec. 11, 1888	403,937	Hilkier, C. F	May 28, 1889
394,307	Sparrow, F. M	Dec. 11, 1888	405,151	Easton, L. F	June 11, 1889

73. MEASURING INSTRUMENTS.—59. FARE REGISTERS.

389,857	Scales, E. A	-----			Sept. 18, 1888
---------	--------------	-------	--	--	----------------

73. MEASURING INSTRUMENTS.—85. TELETHERMOMETERS.

397,548	Hoffmann, C. G	-----			Feb. 12, 1889
---------	----------------	-------	--	--	---------------

74. MACHINE ELEMENTS.—7. GEARING.

No.	NAME.	DATE.	No.	NAME.	DATE.
394,734	Stevens, W. L.-----	Dec. 18, 1888	400,274	Van Depoele, C. J.-----	Mar. 26, 1889

75. METALLURGY.—1. ALLOYS.

401,338	Farr, H. G.-----				Apr. 16, 1889
---------	------------------	--	--	--	---------------

75. METALLURGY.—4. FURNACE ACCESSORIES.

401,394	Walsh, E., jr.-----				Apr. 16, 1889
---------	---------------------	--	--	--	---------------

75. METALLURGY.—17. REDUCING AND SEPARATING.

391,034	Eames, H. H.-----	Oct. 16, 1888	403,752	Hobbs, J. C.-----	May 21, 1889
---------	-------------------	---------------	---------	-------------------	--------------

75. METALLURGY.—34. AMALGAMATORS—ELECTRIC.

386,030	Rae, J. H.-----	July 10, 1888	399,209	Rae, J. H.-----	Mar. 5, 1889
387,347	Eysaman, A. H.-----	Aug. 7, 1888			

75. METALLURGY.—58. REDUCING AND SEPARATING ALUMINIUM.

387,876	Hérault, P.-----	Aug. 14, 1888	400,666	Hall, C. M.-----	Apr. 2, 1889
400,664	Hall, C. M.-----	Apr. 2, 1889	400,667	Hall, C. M.-----	Apr. 2, 1889
400,665	Hall, C. M.-----	Apr. 2, 1889	400,766	Hall, C. M.-----	Apr. 2, 1889

75. METALLURGY.—67. SOLUTION AND PRECIPITATION—CHLORINATION.

405,824	Boittome, T. D.-----				June 25, 1889
---------	----------------------	--	--	--	---------------

75. METALLURGY.—68. SOLUTION AND PRECIPITATION—ELECTROLYSIS.

391,360	Eames, H. H.-----	Oct. 16, 1888	405,604	Rovello, A.-----	June 18, 1889
393,526	Smith, E. L.-----	Nov. 27, 1888			

75. METALLURGY.—82. FIRE BRICK.

335,694	Blaszkye, J.-----				July 10, 1888
---------	-------------------	--	--	--	---------------

78. METAL FORGING.—11. RIVETING.

335,484	Stitzel, F. and Weinedel, C.-----				July 3, 1888
---------	-----------------------------------	--	--	--	--------------

80. METAL ROLLING.—7. MISCELLANEOUS.

388,960	Ellinger, J. O.-----	Sept. 4, 1888	405,733	Griscom, W. W.-----	June 25, 1889
391,542	Madden, A. F.-----	Oct. 23, 1888	405,996	Griscom, W. W.-----	June 25, 1889
393,755	Griscom, W. W.-----	Dec. 4, 1888			

84. MUSIC.—11. EXERCISING DEVICES.

396,156	Hale, F. W.-----				Jan. 15, 1889
---------	------------------	--	--	--	---------------

84. MUSIC.—27. PIANO ATTACHMENTS.

No.	NAME.	DATE.	No.	NAME.	DATE.
396,155	Hale, F. W				Jan. 15, 1889

84. MUSIC.—35. ORGANS.

394,218	Smith, J. A				Dec. 11, 1888
---------	-------------	--	--	--	---------------

84. MUSIC.—37. SELF-PLAYING INSTRUMENTS.

403,834	Gilman, W. H				May 21, 1889
---------	--------------	--	--	--	--------------

88. OPTICS.—9. PHOTOMETERS.

396,951	Packard, J. W				Jan. 29, 1889
---------	---------------	--	--	--	---------------

88. OPTICS.—15. TELESCOPES.

401,229	Trapp, E. A				Apr. 9, 1889
---------	-------------	--	--	--	--------------

89. ORDNANCE.—21. ELECTRICAL APPLIANCES.

396,199	Fiske, B. A				Jan. 15, 1889
---------	-------------	--	--	--	---------------

92. PAPER MAKING.—1. BLEACHING.

396,325	Brin, A. and L. Q	Jan. 15, 1889	398,045	Hermite, E., Paterson, E. J. and Cooper, C. F.	Feb. 19, 1889
---------	-------------------	---------------	---------	--	---------------

94. PAVING.—2. GUTTERS.

10,980	Locke, S. D. (Reis. of 355,185)				Jan. 29, 1889
--------	---------------------------------	--	--	--	---------------

95. PHOTOGRAPHY.—5. CAMERAS.

386,449	Bliss, E. N. and Middleton, J. F				July 24, 1888
---------	----------------------------------	--	--	--	---------------

95. PHOTOGRAPHY.—25. PRINTING AND VIGNETTING.

394,221	Steffens, M. J				Dec. 11, 1888
---------	----------------	--	--	--	---------------

96. COATING WITH METAL.—1. ELECTRO-DEPOSITION.

393,170	McMurray, L	Nov. 20, 1888	397,320	Ward, J. G	Feb. 5, 1889
395,773	Emerson, E	Jan. 8, 1889	403,452	Yale, C. O	June 18, 1889

98. PNEUMATICS.—32. AIR AND GAS PUMPS—MECHANICAL.

392,686	Packard, J. W	Nov. 13, 1888	401,580	Packard, J. W	Apr. 16, 1889
---------	---------------	---------------	---------	---------------	---------------

101. PRINTING.—14. DELIVERING.

391,820	Rossney, W. C. and Hunt, C. L				Oct. 30, 1888
---------	-------------------------------	--	--	--	---------------

101. PRINTING.—15. ELECTROTYPING.

No.	NAME.	DATE.	No.	NAME.	DATE.
385,519	McIndoe, G. F. and J. W. -----	July 3, 1888	401,631	Benedict, G. H. and Furlong, P. M.	Apr. 16, 1889

101. PRINTING.—30. ROTARY.

404,959	Crowell, L. C. -----	June 11, 1889
---------	----------------------	---------------

101. PRINTING.—42. TYPE-WRITING.

390,768	Ganse, H. D. -----	Oct. 9, 1888
---------	--------------------	--------------

102. PROJECTILES.—1. BLASTING AND FUSES.

336,281	Waddell, M. -----	July 17, 1888	405,647	Zalinski, E. L. and Smith, H. J.	June 18, 1889
394,192	Macbeth, J. -----	Dec. 11, 1888	405,684	Smith, H. J. and Zalinski, E. L.	June 18, 1889
405,646	Zalinski, E. L. and Smith, H. J.	June 18, 1889			

102. PROJECTILES.—11. PRIMERS.

339,448	Day, S. A. -----	Sept. 11, 1888
---------	------------------	----------------

102. PROJECTILES.—15. SHELLS.

399,881	Graydon, J. W. -----	Mar. 19, 1889
---------	----------------------	---------------

102. PROJECTILES.—16. SHELL FUSES.

399,876	Graydon, J. W. -----	Mar. 19, 1889	399,879	Graydon, J. W. -----	Mar. 19, 1889
---------	----------------------	---------------	---------	----------------------	---------------

102. PROJECTILES.—18. TORPEDOES.

401,851	Parsons, H. W. -----	Apr. 23, 1889
---------	----------------------	---------------

104. RAILWAYS.—3. DEADENING NOISE.

390,293	Green, G. F. -----	Oct. 2, 1888
---------	--------------------	--------------

104. RAILWAYS.—9. PNEUMATIC.

395,130	Given, J. L. -----	Dec. 25, 1888	398,414	Lieb, C. A. -----	Feb. 26, 1889
395,170	Perkins, E. A. and Stuart, D. C.	Dec. 25, 1888	398,836	Lieb, C. A. -----	Mar. 5, 1889
398,353	Stitzel, F. and Weinedel, C. -----	Feb. 19, 1889			

104. RAILWAYS.—10. RAILS.

385,701	Euphrat, F. -----	July 10, 1888
---------	-------------------	---------------

104. RAILWAYS.—18. TRACTION.

397,830	Caughey, R. C. -----	Feb. 12, 1889
---------	----------------------	---------------

104. RAILWAYS.—19. TURN-TABLES.

No.	NAME.	DATE.	No.	NAME.	DATE.
396,649	Davidson, W -----				Jan. 22, 1889

104. RAILWAYS.—21. SIGNALS.

385,877	Peters, C. H -----	July 10, 1888	390,081	Inghram, A. G -----	Sept. 25, 1888
385,963	Sharp, E. A -----	July 10, 1888	390,993	Sutherland, J. B -----	Oct. 9, 1888

104. RAILWAYS.—47. TRACTION—UNDERGROUND.

386,732	Wood, F. W. and Fowler, J ---	July 24, 1888	397,385	Phelps, W. S -----	Feb. 5, 1889
394,648	Harris, T. W -----	Dec. 18, 1888	398,294	Van Depoele, C. J -----	Feb. 19, 1889

104. RAILWAYS.—94. SIGNALS—AUTOMATIC.

388,023	Curry, F. P -----	Aug. 21, 1888	402,398	Carter, J. T -----	Apr. 30, 1889
---------	-------------------	---------------	---------	--------------------	---------------

105. RAILWAY CARS.—6. BRAKES.

388,731	Sims, J. W -----				Aug. 28, 1888
---------	------------------	--	--	--	---------------

105. RAILWAY CARS.—17. LOCOMOTIVES.

387,610	Weis, J -----				Aug. 7, 1888
---------	---------------	--	--	--	--------------

105. RAILWAY CARS.—22. SAFETY CARS.

386,403	James, J. W -----				July 17, 1888
---------	-------------------	--	--	--	---------------

105. RAILWAY CARS.—28. CARS—STEAM STREET.

387,726	McDougall, W. M -----	Aug. 14, 1888	398,209	Weis, F. J -----	Feb. 19, 1889
---------	-----------------------	---------------	---------	------------------	---------------

105. RAILWAY CARS.—31. STREET CARS.

386,512	Verstraete, E -----				July 24, 1888
---------	---------------------	--	--	--	---------------

116. SIGNALS.—27. STATION INDICATORS.

393,237	Irving, J. I -----				Nov. 20, 1888
---------	--------------------	--	--	--	---------------

120. STATIONERY.—36. PAPER CLIPS.

397,472	Seymour, J. B -----				Feb. 5, 1889
---------	---------------------	--	--	--	--------------

121. STEAM ENGINES.—23. SPEED GOVERNORS—CENTRIFUGAL.

398,456	Rumely, W. N -----				Feb. 26, 1889
---------	--------------------	--	--	--	---------------

121. STEAM ENGINES.—43. TRAPS—EXPANSION.

399,198	Johnson, W. S -----				Mar. 5, 1889
---------	---------------------	--	--	--	--------------

122. STEAM BOILERS.—22. FEEDERS.

No.	NAME.	DATE.	No.	NAME.	DATE.
403,972	Sturtevant, T. L -----				May 28, 1889

122. STEAM BOILERS.—5. CIRCULATION.

399,165	Smith, D. W -----				Mar. 5, 1889
---------	-------------------	--	--	--	--------------

123. AIR AND GAS ENGINES.—3. EXPLOSIVE.

389,608	Skinner, H -----	Sept. 18, 1888	403,376	Rogers, N. and Wharry, J. A --	May 14, 1889
390,710	Shanck, H. K -----	Oct. 9, 1888	403,379	Rogers, N. and Wharry, J. A --	May 14, 1889
400,754	Debonteville, E, D. and Malan- din, L. P. C. -----	Apr. 2, 1889	403,380	Rogers, N. and Wharry, J. A --	May 14, 1889

124. DISTILLATION.—1. AGEING LIQUORS.

404,682	Cabell, S. G -----				June 4, 1889
---------	--------------------	--	--	--	--------------

125. STONE WORKING.—10. DRILLS.

394,203	Moldenke, R. G. G -----	Dec. 11, 1888	405,187	Sperry, E. A -----	June 11, 1889
---------	-------------------------	---------------	---------	--------------------	---------------

125. STONE WORKING.—14. MINING MACHINES.

405,183	Sperry, E. A -----				June 11, 1889
---------	--------------------	--	--	--	---------------

126. STOVES AND FURNACES.—73. CAR HEATERS.

386,322	Howe, T. B -----				July 17, 1888
---------	------------------	--	--	--	---------------

128. SURGERY.—13. INHALERS AND RESPIRATORS.

404,986	Rudolfy, J -----				June 11, 1889
---------	------------------	--	--	--	---------------

136. STEAM-ENGINE VALVES.—10. STEAM-ACTUATED.

393,596	Westinghouse, G., jr -----				Nov. 27, 1888
---------	----------------------------	--	--	--	---------------

136. STEAM-ENGINE VALVES.—11. THROTTLE.

400,245	Neu, G. S -----				Mar. 26, 1889
---------	-----------------	--	--	--	---------------

137. WATER DISTRIBUTION.—16. MAINS AND PIPES.

401,409	Brown, A. H -----				Apr. 16, 1889
---------	-------------------	--	--	--	---------------

138. HYDRAULIC MOTORS.—3. ROTARY.

400,209	Haskins, D. G -----				Mar. 26, 1889
---------	---------------------	--	--	--	---------------

138. HYDRAULIC MOTORS.—8. ELEVATORS.

390,033	Otis, C. R -----				Sept. 25, 1888
---------	------------------	--	--	--	----------------

148. METAL TEMPERING, ANNEALING, AND CEMENTATION.—3. TEMPERING AND ANNEALING—METALS GENERALLY.

No.	NAME.	DATE.	No.	NAME.	DATE.
388,078	Sedgwick, F -----				Aug. 21, 1888

148. METAL TEMPERING, ANNEALING, AND CEMENTATION.—10. TEMPERING AND ANNEALING—APPLICATIONS OF ELECTRICITY.

388,645	Diehl, P -----	Aug. 28, 1888	401,721	Sedgwick, F -----	Apr. 16, 1889
400,366	Sedgwick, F -----	Mar. 26, 1889			

181. ACOUSTICS.—3. TELEPHONES—MECHANICAL.

385,839	Brear, S. D -----	July 10, 1888	390,062	Bowles, R. C. M -----	Sept. 25, 1888
386,238	Clarke, F. E -----	July 17, 1888	392,233	Shaver, G. F -----	Nov. 6, 1888
386,980	Hall, A. W -----	July 31, 1888	395,816	Mellet, L -----	Nov. 13, 1888
387,636	Garl, M -----	Aug. 14, 1888	399,016	Butterworth, A. W -----	Mar. 5, 1889
387,969	Clark, F. E -----	Aug. 14, 1888	399,635	Shaver, G. F -----	Mar. 12, 1889
389,601	Rosebrugh, A. M -----	Sept. 18, 1888			

181. ACOUSTICS.—4. PHONOGRAPHS.

386,974	Edison, T. A -----	July 31, 1888	404,850	Littlehales, G. H -----	June 11, 1889
392,953	Herrington, G. H -----	Nov. 13, 1888			

185. MECHANICAL MOTORS.—5. MISCELLANEOUS.

401,207	Randall, C. A -----				Apr. 9, 1889
---------	---------------------	--	--	--	--------------

186. STORE SERVICE.—2. PROPULSION.

386,314	Green, G. F -----				July 17, 1888
---------	-------------------	--	--	--	---------------

186. STORE SERVICE.—9. VENDING APPARATUS.

397,398	Spiegel, W. G -----	Feb. 5, 1889	397,975	De Redon, C. F -----	Feb. 19, 1889
---------	---------------------	--------------	---------	----------------------	---------------

APPENDIX No. VIII.

PART II.

CONSISTING OF A

NUMERICAL AND CHRONOLOGICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1888, to June 30, 1889, inclusive, giving names of Inventors,
numbers and dates of Patents, and the sub-class to which each belongs.

NUMERICAL INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1888, TO JUNE 30, 1889.

No.	NAME.	CLASS.	DATE.
385,344	Eaton, A. K.	Batteries, galvanic	July 3, 1888
385,357	Kelly, J. E.	Annunciators	July 3, 1888
385,363	Martel, A. F.	Railway signals	July 3, 1888
385,379	Short, S. H.	Locomotion	July 3, 1888
385,384	Thomson, E.	Heaters	July 3, 1888
385,385	Thomson, E.	do	July 3, 1888
385,386	Thomson, E.	do	July 3, 1888
385,388	Thompson, W. C.	Telegraphy, fire	July 3, 1888
385,390	Trippe, S. L.	Batteries, secondary	July 3, 1888
385,393	Weisser, T.	Gas burners, incandescent	July 3, 1888
385,413	Heysinger, I. W.	Locomotion	July 3, 1888
385,436	Adams, J. S. and Morrell, A. W.	Lights, sockets and keys	July 3, 1888
385,458	Harding, A.	Magneto-electric	July 3, 1888
385,482	Scribner, C. E.	Telephones, systems	July 3, 1888
385,484	Stitzel, F. and Weinedel, C.	Riveting	July 3, 1888
385,493	Wood, J. J.	Drop lights and hangers	July 3, 1888
385,494	Wright, C. D.	Cut-outs, electro-magnetic	July 3, 1888
385,519	McIndoe, G. F. and J. W.	Electrotyping	July 3, 1888
385,528	Scribner, C. E.	Telephones, systems	July 3, 1888
385,539	Bergman, E. F.	Cut-outs, mechanical	July 3, 1888
385,556	Hoke, C. U.	Medical and surgical, body-wear	July 3, 1888
385,558	King, F.	Batteries, secondary	July 3, 1888
385,565	McLaughlin, J. F.	Telegraphy, printing	July 3, 1888
385,576	Sibley, C. C.	Conductors	July 3, 1888
385,647	Thomson, E.	Meters	July 3, 1888
385,664	Emmner, J., jr.	Telephones, electric	July 3, 1888
385,672	Hunter, R. M.	Locomotion	July 3, 1888
385,675	Lugo, O.	Motors	July 3, 1888
385,677	Martel, A. F.	Railway signals	July 3, 1888
385,686	Wailles, J. S.	Clothes lines	July 3, 1888
385,694	Blaszkaye, J.	Fire brick	July 10, 1888
385,701	Euphrat, F.	Rails	July 10, 1888
385,705	Gaston, J. E.	Lights, arc, positive feed	July 10, 1888
385,727	Salisbury, W. S.	Locomotion	July 10, 1888
385,760	Kookogey, W. P.	Batteries, galvanic	July 10, 1888
385,770	Mingle, G. W. and M.	Cut-outs, thermal	July 10, 1888
385,774	Roberts, DeW. C.	Locomotion	July 10, 1888
385,782	Wheeler, S. S.	Cut-outs, mechanical	July 10, 1888
385,787	Bentley, E. M.	Locomotion	July 10, 1888
385,815	Mayo, J. E.	Cut-outs, mechanical	July 10, 1888
385,826	Sechrist, A.	do	July 10, 1888
385,839	Brear, S. D.	Telephones, mechanical	July 10, 1888
385,846	Cook, J. A.	Telephones, switch-boards	July 10, 1888
385,863	Kellogg, M. G.	Telephones, systems	July 10, 1888
385,877	Peters, C. H.	Railways, signals	July 10, 1888
385,894	Wood, M. M.	Annunciators	July 10, 1888
385,900	Amet, E. H.	Recorders	July 10, 1888
385,902	Bentley, E. M.	Locomotion	July 10, 1888
385,903	Bentley, E. M.	do	July 10, 1888
385,915	Daft, L.	do	July 10, 1888
385,920	De Redon, C. F.	Railway signals	July 10, 1888
385,927	Hazell, J. W.	Applications, general	July 10, 1888
385,928	Heald, E. W.	Locomotion	July 10, 1888
385,943	Mitchell, F. B.	Magneto-electric	July 10, 1888
385,956	Parks, N.	Telephones, electric	July 10, 1888
385,963	Sharp, E. A.	Railway signals	July 10, 1888
385,964	Sharp, E. A.	do	July 10, 1888
385,974	Vail, T. N.	Telephones, systems	July 10, 1888
385,975	Vail, T. N.	do	July 10, 1888
385,976	Vail, T. N.	do	July 10, 1888
385,977	Vail, T. N.	do	July 10, 1888
385,978	Vail, T. N.	do	July 10, 1888
385,984	Whitney, E. R.	Applications, general	July 10, 1888

No.	NAME.	CLASS.	DATE.
386,030	Rae, J. H.	Amalgamators, electric	July 10, 1888
386,049	Wright, G. H.	Railway signals	July 10, 1888
386,059	Cuttriss, C.	Telegraphy, automatic	July 10, 1888
386,066	Gridley, F. J.	Magnetic locks and bolts	July 10, 1888
386,071	Humans, W.	Magneto-electric, hand-machines	July 10, 1888
386,073	Jewell, O. H.	Purifying water	July 10, 1888
386,085	Ries, E. E.	Locomotion	July 10, 1888
386,086	Ries, E. E.	do	July 10, 1888
386,087	Ries, E. E.	do	July 10, 1888
386,088	Ries, E. E.	Heaters	July 10, 1888
386,090	Roberts, I. L.	Batteries, galvanic	July 10, 1888
386,099	Wightman, M. J. and Lemp, H.	Cut-outs, thermal	July 10, 1888
386,103	Bohmeyer, C.	Clocks, electric	July 17, 1888
386,111	Cutler, H. H.	Insulators	July 17, 1888
386,129	Hotchkiss, Z. P.	Transmitters	July 17, 1888
386,149	Meserole, A. V.	Batteries, galvanic	July 17, 1888
386,150	Meserole, A. V.	do	July 17, 1888
386,175	Wilson, J. C.	Telegraphy, fire	July 17, 1888
386,184	Chesebrough, R. A.	Locomotion	July 17, 1888
386,189	Delany, P. B.	Indicators	July 17, 1888
386,225	Walker, G. W.	Batteries, secondary, applications	July 17, 1888
386,238	Clarke, F. E.	Telephones, mechanical	July 17, 1888
386,281	Waddell, M.	Blasting and fuses	July 17, 1888
386,282	Woods, G. T.	Locomotion	July 17, 1888
386,314	Green, G. F.	Propulsion	July 17, 1888
386,322	Howe, T. B.	Car heaters	July 17, 1888
386,340	Miot, G.	Magneto-electric	July 17, 1888
386,380	Brown, C. W.	Telephones, electric	July 17, 1888
386,403	James, J. W.	Safety cars	July 17, 1888
386,441	Thomson, E.	Heaters	July 17, 1888
10,944	Weston, E. (Reis. of 381,304.)	Rheostats	July 17, 1888
10,945	Weston, E. (Reis. of 381,305.)	do	July 17, 1888
386,449	Bliss, E. N. and Middleton, J. F.	Cameras	July 24, 1888
386,463	Grah, E.	Valve-controllers	July 24, 1888
386,512	Verstraete, E.	Street cars	July 24, 1888
386,541	Ives, E. B.	Telegraphy, railway-car	July 24, 1888
386,543	Jarman, A. J.	Locomotion	July 24, 1888
386,561	Sawyer, W. H.	Conductors	July 24, 1888
386,569	Wheelock, B. J. and J. W.	Batteries, galvanic	July 24, 1888
386,580	Enos, J. A.	Batteries, secondary	July 24, 1888
386,581	Enos, J. A.	Locomotion	July 24, 1888
386,597	McLaughlin, J. C.	Annunciators	July 24, 1888
386,602	Parsons, H. W. and Hoduit, J.	Regulators	July 24, 1888
386,636	Jones, L., jr.	Knitting and netting, circular, circular machines.	July 24, 1888
386,646	McLaughlin, J. F.	Telegraphy, printing	July 24, 1888
386,648	Miot, G.	Galvanometers	July 24, 1888
386,685	Brown, C. E. L.	Magneto-electric	July 24, 1888
386,729	Townsend, L. and Auten, J. E.	Telegraphy, keys	July 24, 1888
386,732	Wood, F. W. and Fowler, J.	Railways, traction, underground	July 24, 1888
386,754	Muir, J. S.	Electrodes	July 24, 1888
386,767	Bulen, G. F.	Time checks	July 24, 1888
386,772	Davis, E.	Telegraphy, fire	July 24, 1888
386,775	Fritzsche, W.	Magneto-electric	July 24, 1888
386,784	Knight, W. H.	Locomotion	July 24, 1888
10,949	Williams, P. G. and Roovers, A. W. (Reis. of 372,441.)	Applications, general	July 24, 1888
386,796	Belfield, R.	Systems of distribution	July 31, 1888
386,797	Belfield, R.	do	July 31, 1888
386,814	Gray, E.	Telegraphy, automatic	July 31, 1888
386,815	Gray, E.	do	July 31, 1888
386,828	Johnson, C. W.	Thermostats	July 31, 1888
386,860	Williams, P. G. and Roovers, A. W.	Applications, general	July 31, 1888
386,886	Kellogg, M. G.	Telephones, systems	July 31, 1888
386,887	Kellogg, M. G.	do	July 31, 1888
386,898	Sellon, J. S.	Batteries, secondary	July 31, 1888
386,919	Everitt, P.	Applications, general	July 31, 1888
386,925	Lee, C. T.	Insulating materials	July 31, 1888
386,936	Slattery, M. M. M.	Systems of distribution	July 31, 1888
386,956	Belfield, R.	Lights, systems	July 31, 1888
386,965	Cole, W. R.	Telephones, electric	July 31, 1888
386,974	Edison, T. A.	Phonographs	July 31, 1888
386,980	Hall, A. W.	Telephones, mechanical	July 31, 1888
386,986	Joslin, W. E.	Insulators	July 31, 1888
386,992	Lange, P.	Galvanometers	July 31, 1888
386,993	Lange, P.	do	July 31, 1888
387,010	Schmid, A.	Magneto-electric	July 31, 1888

No.	NAME.	CLASS.	DATE.
387,013	Shallenberger, O. B. and Byllesby, H. M.	Induction-coils	July 31, 1888
387,044	Brady, T. H.	Lamp shades	July 31, 1888
387,049	Carr, R. L. and Borden, P.	Batteries, galvanic	July 31, 1888
387,051	Cheney, F. A.	Lightning arresters	July 31, 1888
387,117	Stanley, W., jr.	Systems of distribution	July 31, 1888
387,123	Thomson, E.	Induction-coils	July 31, 1888
387,131	Anthony, W. A.	Galvanometers	July 31, 1888
387,145	Clamer, F. J.	Incrustation	July 31, 1888
387,146	Clamer, F. J.	do	July 31, 1888
387,160	Guntz, G.	Motors	July 31, 1888
387,194	Waterhouse, A. G.	Regulators	July 31, 1888
387,195	Waterhouse, A. G.	do	July 31, 1888
387,265	Stuckert, J. F.	Alarms, fire	Aug. 7, 1888
387,276	Wieseman, A. G.	Clocks, electric	Aug. 7, 1888
387,286	Fewson, H.	Sewage and night-soil	Aug. 7, 1888
387,310	Mather, R. H.	Motors	Aug. 7, 1888
387,316	Orcutt, E. L.	Railway signals	Aug. 7, 1888
387,343	Crompton, R. E. B.	Magneto-electric	Aug. 7, 1888
387,347	Eysaman, A. H.	Amalgamators, electric	Aug. 7, 1888
387,365	Orcutt, E. L.	Railway signals	Aug. 7, 1888
387,382	Weems, D. G.	Locomotion	Aug. 7, 1888
387,383	Weems, D. G.	do	Aug. 7, 1888
387,432	Meston, A. W.	Magneto-electric	Aug. 7, 1888
387,463	Vansant, J. A. and Anderson, F. S.	Rheostats	Aug. 7, 1888
387,464	Vansant, J. A. and Anderson, F. S.	do	Aug. 7, 1888
387,467	Webster, W., jr.	Purifying water	Aug. 7, 1888
387,505	Forbes, G.	Meters	Aug. 7, 1888
387,526	McElroy, J. F.	Cut-outs, mechanical	Aug. 7, 1888
387,585	Dudley, W. J.	Telegraphy, fire	Aug. 7, 1888
387,610	Weis, J.	Locomotives	Aug. 7, 1888
387,615	Brown, H. P.	Lights, systems	Aug. 7, 1888
387,636	Garl, M.	Telephones, mechanical	Aug. 14, 1888
387,642	Hewett, E. M.	Batteries, galvanic	Aug. 14, 1888
387,643	Hewett, E. M.	do	Aug. 14, 1888
387,645	Kellogg, M. G.	Telephones, systems	Aug. 14, 1888
387,654	Overlack, B.	Batteries, galvanic	Aug. 14, 1888
387,672	Yarwood, M. C.	Knitting and netting, stopping	Aug. 14, 1888
387,679	Fitch, D. H.	Batteries, secondary	Aug. 14, 1888
387,703	Warner, C. D.	Clocks, electric	Aug. 14, 1888
387,704	Warner, C. D.	do	Aug. 14, 1888
387,714	Fiske, B. A.	Motors	Aug. 14, 1888
387,718	Hartwell, N. W.	Telephones, supports	Aug. 14, 1888
387,726	McDougall, W. M.	Cars, steam, street	Aug. 14, 1888
387,732	Powers, J. A.	Cut-outs, mechanical	Aug. 14, 1888
387,839	Woods, G. T.	Batteries, galvanic	Aug. 14, 1888
387,842	Amet, E. H.	Recorders	Aug. 14, 1888
387,853	Buckingham, C. L. and Lemp, H.	Regulators	Aug. 14, 1888
387,876	Hérault, P.	Aluminium, reducing and separating	Aug. 14, 1888
387,888	Kellogg, M. G.	Telephones, systems	Aug. 14, 1888
387,889	Kellogg, M. G.	do	Aug. 14, 1888
387,890	Kellogg, M. G.	do	Aug. 14, 1888
387,932	Thompson, W. H.	Lights, systems and appliances	Aug. 14, 1888
387,969	Clark, F. E.	Telephones, mechanical	Aug. 14, 1888
387,974	Hexamer, C. J.	Clocks, electric	Aug. 14, 1888
387,988	Pfatscher, M.	Batteries, secondary, applications	Aug. 14, 1888
388,003	Shallenberger, O. B.	Meters	Aug. 14, 1888
388,004	Shallenberger, O. B.	do	Aug. 14, 1888
388,008	Ader, C.	Circuits and systems	Aug. 21, 1888
388,023	Curry, F. P.	Signals, automatic	Aug. 21, 1888
388,052	Kellogg, M. G.	Telephones, systems	Aug. 21, 1888
388,053	Killin, V. C.	Lights, arc, gravity feed, gear-clutch	Aug. 21, 1888
388,078	Sedgwick, F.	Tempering and annealing metals	Aug. 21, 1888
388,091	Van Rysselberghe, F.	Telegraphy, reed	Aug. 21, 1888
388,092	Van Rysselberghe, F.	do	Aug. 21, 1888
388,093	Waddell, M.	Magneto-electric	Aug. 21, 1888
388,140	McLaughlin, J. F.	Telegraphy, printing	Aug. 21, 1888
388,141	McLaughlin, J. F.	do	Aug. 21, 1888
388,142	McLaughlin, J. F.	do	Aug. 21, 1888
388,143	McLaughlin, J. F.	do	Aug. 21, 1888
388,177	Bridewell, R. F.	Lighting devices	Aug. 21, 1888
388,181	Cassard, H.	Batteries, galvanic	Aug. 21, 1888
388,229	Thode, C. W. F.	Bolts	Aug. 21, 1888
388,242	Barney, W. C.	Telephones, electric	Aug. 21, 1888
388,244	Bandot, J. M. E.	Telegraphy, printing	Aug. 21, 1888
388,245	Benardos, N.	Heaters	Aug. 21, 1888
388,246	Benardos, N.	do	Aug. 21, 1888
388,247	Blackwell, J. L.	Locomotion	Aug. 21, 1888

No.	NAME.	CLASS.	DATE.
388,283	Kellogg, M. G	Telephones, systems	Aug. 21, 1888
388,294	McGowen, J. J	Igniting devices	Aug. 21, 1888
388,300	O'Kelly, J	Steering and propulsion	Aug. 21, 1888
388,312	Scarles, B	Batteries, galvanic	Aug. 21, 1888
388,333	Barnard, W. T	Telegraphy, reed	Aug. 21, 1888
388,335	Beattie, J., jr	Batteries, secondary	Aug. 21, 1888
388,344	Dey, C. E	Annunciators	Aug. 21, 1888
388,357	Guest, J. H	Telegraphy, fire, alarms and extinguishers	Aug. 21, 1888
388,358	Guest, J. H	Telegraphy, fire	Aug. 21, 1888
388,415	Hewins, E. H	Shaft couplings	Aug. 28, 1888
388,430	Meserole, A. V	Batteries, galvanic	Aug. 28, 1888
388,438	Nutter, F. H	Alarms, burglar	Aug. 28, 1888
388,442	Phipps, E. H	Conductors, underground	Aug. 28, 1888
388,453	Scribner, C. E	Telephones, systems	Aug. 28, 1888
388,454	Scribner, C. E	do	Aug. 28, 1888
388,477	Conner, W. A	Conductors	Aug. 28, 1888
388,481	Delany, P. B	Circuits and systems	Aug. 28, 1888
388,482	Eisenhart, C. A	Induction-coils	Aug. 28, 1888
388,487	Harris, A. E	Conductors	Aug. 28, 1888
388,505	Petit, H. S. and Bresson, H. S	Thermostats	Aug. 28, 1888
388,512	Van Gestel, J. T	Motors	Aug. 28, 1888
388,512	Van Gestel, J. T	Magneto-electric	Aug. 28, 1888
388,514	Van Gestel, J. T	Locomotion	Aug. 28, 1888
388,538	Daft, L	do	Aug. 28, 1888
388,581	Pratt, H. P	Medical and surgical, body-wear	Aug. 28, 1888
388,583	Raab, K	Meters	Aug. 28, 1888
388,592	Siebel, J. E	Incrustation	Aug. 28, 1888
388,594	Spencer, L. W	Lights, arc	Aug. 28, 1888
388,601	Trippe, S. L	Batteries, secondary	Aug. 28, 1888
388,622	Brainerd, F. W	Clocks, electric	Aug. 28, 1888
388,628	Carr, R. L. and Borden, P	Batteries, galvanic	Aug. 28, 1888
388,631	Chase, S. A	Telegraphy, fire	Aug. 28, 1888
388,645	Diehl, P	Tempering and annealing	Aug. 28, 1888
388,668	Gibson, C. D. P	Batteries, secondary	Aug. 28, 1888
388,690	Kirwan, G. H	Indicators	Aug. 28, 1888
388,697	Lea, J	Lights, arc, positive feed, gear-clutch	Aug. 28, 1888
388,707	Morris, H. G	Meters	Aug. 28, 1888
388,723	Schardt, B. and Jones, G	Lights, arc, special features	Aug. 28, 1888
388,731	Sims, J. W	Brakes	Aug. 28, 1888
388,746	Van Gestel, J. T	Batteries, secondary	Aug. 28, 1888
388,753	Batley, J	Motors	Aug. 28, 1888
388,757	Burns, J	Lights, filaments and carbons	Aug. 28, 1888
388,791	Scribner, C. E	Telephones, systems	Aug. 28, 1888
388,803	Woods, G. T	Telegraphy, railway-car	Aug. 28, 1888
388,836	Crane, M. G	Bells	Sept. 4, 1888
388,837	Crockett, C. H. and Allen, C. C	Annunciators	Sept. 4, 1888
388,859	Green, G. F	Locomotion	Sept. 4, 1888
388,862	Griswold, H. P	Steering and propulsion	Sept. 4, 1888
388,869	Hill, H. T	Telegraphy, railway-car	Sept. 4, 1888
388,876	Humans, W	Annunciators	Sept. 4, 1888
388,877	Humans, W	Magneto-electric, hand-machines	Sept. 4, 1888
388,922	Sheehy, R. J	Telephones, systems	Sept. 4, 1888
388,955	Daft, L	Locomotion	Sept. 4, 1888
388,960	Ellinger, J. O	Metal-working, miscellaneous	Sept. 4, 1888
389,001	Ongley, C. E	Applications, tools and machines	Sept. 4, 1888
389,011	Riker, A. L	Magneto-electric	Sept. 4, 1888
389,029	Waterhouse, A. G	Regulators	Sept. 4, 1888
389,030	Waterhouse, A. G	do	Sept. 4, 1888
389,037	Wilkinson, E	Applications, tools and machines	Sept. 4, 1888
389,062	Delany, P. B	Circuits and systems	Sept. 4, 1888
389,080	Humans, W	Bells	Sept. 4, 1888
389,096	Newman, E. A	Thermostats	Sept. 4, 1888
389,097	Newman, E. A	Valve-controllers	Sept. 4, 1888
389,098	Newman, E. A	Thermostats	Sept. 4, 1888
389,099	Newman, E. A	do	Sept. 4, 1888
389,100	Newman, E. A	do	Sept. 4, 1888
389,122	Turner, W. A	Railway signals	Sept. 4, 1888
389,123	Vigil, I. and Revueltas, J. N	Bathometers	Sept. 4, 1888
389,124	Weston, E	Batteries, thermal	Sept. 4, 1888
389,125	Weston, E	do	Sept. 4, 1888
389,140	Eaton, A. K	Batteries, galvanic	Sept. 4, 1888
389,142	Fiske, B. A	Telegraphy, printing	Sept. 4, 1888
389,151	Hogan, G. L	Igniting devices	Sept. 4, 1888
389,184	Zech, Otto	Magneto-electric	Sept. 4, 1888
389,186	Askew, C. B. and Pumpelly, J. K	Batteries, secondary	Sept. 11, 1888
389,187	Baldwin, J. W	Medical and surgical, body-wear	Sept. 11, 1888
389,189	Blackwell, J. L	Locomotion	Sept. 11, 1888

No.	NAME.	CLASS.	DATE.
389,196	Chase, H. A.	Electro-magnets	Sept. 11, 1888
389,197	Chase, H. A.	Motors	Sept. 11, 1888
389,207	Eastwick, A. E.	do	Sept. 11, 1888
389,226	Irwin, J.	Railway signals	Sept. 11, 1888
389,229	Knight, W. H.	Locomotion	Sept. 11, 1888
389,230	Knight, W. H.	do	Sept. 11, 1888
389,254	Shepardson, G. D.	do	Sept. 11, 1888
389,265	Thomson, E.	Regulators	Sept. 11, 1888
389,272	Weston, E.	Alarms, burglar	Sept. 11, 1888
389,273	Weston, E.	Recorders	Sept. 11, 1888
389,274	Weston, E.	Galvanometers	Sept. 11, 1888
389,278	Bentley, E. M.	Locomotion	Sept. 11, 1888
389,279	Bentley, E. M.	do	Sept. 11, 1888
389,280	Bergmann, S.	Lights, sockets and keys	Sept. 11, 1888
389,281	Blackwell, J. L.	Locomotion	Sept. 11, 1888
389,282	Blackwell, J. L.	do	Sept. 11, 1888
389,297	Griscom, W. W.	Lighting, systems	Sept. 11, 1888
389,314	McIntire, C.	Connectors	Sept. 11, 1888
389,337	Stitzel, F. and Weinedel, C.	Relays and sounders	Sept. 11, 1888
389,352	Anthony, W. A.	Motors	Sept. 11, 1888
389,356	Bickley, C. G.	Batteries, secondary, applications	Sept. 11, 1888
389,369	Edison, T. A.	Lights, incandescent	Sept. 11, 1888
389,421	Tag, W. and Smith, S. C.	Igniting devices	Sept. 11, 1888
389,423	Tirrell, J. P.	Bells	Sept. 11, 1888
389,448	Day, S. A.	Primers	Sept. 11, 1888
389,455	Elliott, R. M.	Batteries, secondary	Sept. 11, 1888
389,526	Moore, Frank	Lamp shades	Sept. 11, 1888
389,532	Serson, J.	Batteries, galvanic	Sept. 11, 1888
389,601	Rosebrugh, A. M.	Telephones, mechanical	Sept. 18, 1888
389,608	Skinner, H.	Air and gas engines, explosive	Sept. 18, 1888
389,626	Wirsching, A.	Time checks	Sept. 18, 1888
389,638	Conant, T. P.	Batteries, secondary, applications	Sept. 18, 1888
389,640	Cox, H. B.	Induction-coils	Sept. 18, 1888
389,658	Knight, W. H.	Magneto-electric	Sept. 18, 1888
389,676	Trippe, S. L.	Batteries, galvanic	Sept. 18, 1888
389,678	Turner, T. G.	Telegraphy, fire	Sept. 18, 1888
389,692	Downs, H. T.	Igniting devices	Sept. 18, 1888
389,729	Wiest, J.	Heaters	Sept. 18, 1888
389,752	Lauckert, E. F. H. H.	Magneto-electric	Sept. 18, 1888
389,758	Morrell, A. W.	Lighting, systems	Sept. 18, 1888
389,764	Rutter, N. P.	Medical and surgical, body-wear	Sept. 18, 1888
389,779	Thomson, E.	Magneto-electric	Sept. 18, 1888
389,781	Webster, W.	Sewage and night-soil	Sept. 18, 1888
389,795	De Ferranti, S. Z.	Systems of distribution	Sept. 18, 1888
389,796	Doriot, C.	Motors	Sept. 18, 1888
389,799	Estabrook, W. W.	Applications, general	Sept. 18, 1888
389,812	Hicks, T. H.	Magneto-electric	Sept. 18, 1888
389,822	Nicholson, J. D., McElroy, W. J. and McTighe, T. J.	Locomotion	Sept. 18, 1888
389,838	De Ferranti, S. Z.	Induction-coils	Sept. 18, 1888
389,839	Dubinski, B.	Telegraphy, fire	Sept. 18, 1888
389,853	Ozley, C. E.	Applications, tools and machines	Sept. 18, 1888
389,857	Scales, E. A.	Fare registers	Sept. 18, 1888
389,870	Pishop, J. D.	Meters	Sept. 25, 1888
389,876	Diehl, P.	Motors	Sept. 25, 1888
389,882	Faure, C. A.	Batteries, secondary	Sept. 25, 1888
389,883	Field, S. D.	Telegraphy, automatic	Sept. 25, 1888
389,885	Heysinger, I. W.	Lights, sockets and keys	Sept. 25, 1888
389,894	Meyers, W. G. and Coward, F. E.	Magneto-electric	Sept. 25, 1888
389,935	McDonald, W. H.	Batteries, secondary, applications	Sept. 25, 1888
389,943	Silliman, R. F.	Conductors, underground	Sept. 25, 1888
389,974	Pfannkuche, G. and A.	Magneto-electric	Sept. 25, 1888
390,001	Brown, L. W.	Towers	Sept. 25, 1888
390,033	Otis, C. R.	Elevators	Sept. 25, 1888
390,053	Bernheim, E. I.	Telephones, calls	Sept. 25, 1888
390,062	Bowles, R. C. M.	Telephones, mechanical	Sept. 25, 1888
390,067	Chisholm, I. W.	Galvanometers	Sept. 25, 1888
390,081	Inghram, A. G.	Railways, signals	Sept. 25, 1888
390,101	Tweedale, E.	Applications, general	Sept. 25, 1888
390,113	Bullough, J.	do	Sept. 25, 1888
390,115	Delany, P. B.	Galvanometers	Sept. 25, 1888
390,180	Mather, W. and Hopkinson, J. and E.	Magneto-electric	Sept. 25, 1888
390,196	Acheson, E. G.	Applications, general	Oct. 2, 1888
390,229	Hempel, A.	Separators	Oct. 2, 1888
390,230	Hoeffling, C. E.	Clocks, electric	Oct. 2, 1888
390,245	Mather, R. H.	Lights, arc, gravity feed, clutch	Oct. 2, 1888
390,231	Butz, A. M.	Thermostats	Oct. 2, 1888

No.	NAME.	CLASS.	DATE.
390,293	Green, G. F	Railways, deadening noise	Oct. 2, 1888
390,301	Hill, W. S	Magneto-electric	Oct. 2, 1888
390,310	Packard, J. W	Lights, filaments and carbons	Oct. 2, 1888
390,318	Thomson, E	Magneto-electric	Oct. 2, 1888
390,329	Williatowsky, A. F. L	Circuit-closers	Oct. 2, 1888
390,354	Epplé, L	Medical and surgical, body-wear	Oct. 2, 1888
390,413	Tesla, N	Systems of distribution	Oct. 2, 1888
390,414	Tesla, N	Magneto-electric	Oct. 2, 1888
390,415	Tesla, N	do	Oct. 2, 1888
390,428	Wright, P	Relays and repeaters	Oct. 2, 1888
390,439	Bradley, C. S	Magneto-electric	Oct. 2, 1888
390,440	Brady, T. H	Lamp shades	Oct. 2, 1888
390,462	Edison, T. A	Lights, filaments and carbons	Oct. 2, 1888
390,463	Edmunds, H	Batteries, secondary, applications	Oct. 2, 1888
390,464	Edmunds, H	do	Oct. 2, 1888
390,481	Johnson, W. A	Cut-outs, mechanical	Oct. 2, 1888
390,544	Woodward, J. H	Electrodes	Oct. 2, 1888
390,575	D'Unger, R	Telephones, electric	Oct. 2, 1888
390,597	Hewett, E. M	Batteries, galvanic	Oct. 2, 1888
390,619	Ries, E. E	Heaters	Oct. 2, 1888
390,642	Bennett, J. B	Keys	Oct. 9, 1888
390,674	Humphreys, D	Batteries, galvanic	Oct. 9, 1888
390,675	Humphreys, D	do	Oct. 9, 1888
390,676	Humphreys, D	do	Oct. 9, 1888
390,677	Humphreys, D	do	Oct. 9, 1888
390,710	Shanek, H. K	Air and gas engines, explosive	Oct. 9, 1888
390,721	Tesla, N	Magneto-electric	Oct. 9, 1888
390,741	Adams, T. E	Conductors, insulators	Oct. 9, 1888
390,748	Brewer, H. J	Batteries, galvanic	Oct. 9, 1888
390,768	Ganse, H. D	Type-writing	Oct. 9, 1888
390,778	Harris, P. A	Circuit-closers	Oct. 9, 1888
390,795	Neu, G. S	Magnetic locks and bolts	Oct. 9, 1888
390,802	Patten, F. J	Circuits and systems	Oct. 9, 1888
390,820	Tesla, N	Regulators	Oct. 9, 1888
390,833	Barrett, A. and Zentner, J	Annunciators	Oct. 9, 1888
390,846	Downing, W. W	Lamp shades	Oct. 9, 1888
390,891	Newlands, A. M	Knitting and netting, stopping	Oct. 9, 1888
390,903	Reinmann, A. L	Lights, incandescent	Oct. 9, 1888
390,904	Ries, E. E	Motors	Oct. 9, 1888
390,905	Ries, E. E	do	Oct. 9, 1888
390,906	Ries, E. E	Magneto-electric	Oct. 9, 1888
390,910	Shallenberger, O. B	Regulators	Oct. 9, 1888
390,911	Shallenberger, O. B	Systems of distribution	Oct. 9, 1888
390,912	Shallenberger, O. B	Magneto-electric	Oct. 9, 1888
390,921	Van Depoele, C. J	Motors	Oct. 9, 1888
390,930	Westinghouse, G., jr	Regulators	Oct. 9, 1888
390,955	Emmner, J., jr	Magneto-electric	Oct. 9, 1888
390,990	Shallenberger, O. B	Systems of distribution	Oct. 9, 1888
390,993	Sutherland, J. B	Railways, signals	Oct. 9, 1888
391,010	Bentz, H.	Meters	Oct. 16, 1888
391,034	Eames, H. H	Reducing and separating	Oct. 16, 1888
391,070	Parrish, M. W. and Cole, W. R	Magneto-electric	Oct. 16, 1888
391,114	Brush, C. F	Regulators	Oct. 16, 1888
391,224	Blair, J. B	Magneto-electric, hand machines	Oct. 16, 1888
391,229	Butler, H. W	Batteries, secondary	Oct. 16, 1888
391,270	Pfannkuche, G.	Magneto-electric	Oct. 16, 1888
391,276	Sax, J	Annunciators	Oct. 16, 1888
391,285	Warth, A	Apparel, cutting	Oct. 16, 1888
391,319	Harris, L. S	Regulators	Oct. 16, 1888
391,351	Adams, J. S	Cut-outs, mechanical	Oct. 16, 1888
391,356	Collins, W. H	Telephones, electric	Oct. 16, 1888
391,360	Eames, H. H	Electrolysis	Oct. 16, 1888
391,364	Granger, E. D	Medical and surgical, body-wear	Oct. 16, 1888
391,394	Weems, D. G	Locomotion	Oct. 16, 1888
391,437	Thomson, E	Systems of distribution	Oct. 23, 1888
391,446	Wiseman, A. G	Clocks, electric	Oct. 23, 1888
391,447	Wright, P	Locomotion	Oct. 23, 1888
391,468	Griscom, W. W	Batteries, secondary, applications	Oct. 23, 1888
391,477	Libbey, H. W	Lights, are, positive feed	Oct. 23, 1888
391,505	Brewer, H. J	Batteries, galvanic	Oct. 23, 1888
391,512	Cleveland, W. B	Cut-outs, mechanical	Oct. 23, 1888
391,517	Cuff, J. E	Conductors	Oct. 23, 1888
391,542	Madden, A. F	Metal working, miscellaneous	Oct. 23, 1888
391,547	Milliken, G. F	Bells	Oct. 23, 1888
391,568	Waters, B. E	Indicators	Oct. 23, 1888
391,587	Dallas, M	Conductors, underground	Oct. 23, 1888
391,590	Doyle, J	Motors	Oct. 23, 1888

No.	NAME.	CLASS.	DATE.
391,592	Eddy, A. H	Galvanometers	Oct. 23, 1888
391,593	Eddy, A. H	Motors	Oct. 23, 1888
391,594	Eddy, A. H	Cut-outs, thermal	Oct. 23, 1888
391,595	Edison, T. A	Systems of distribution	Oct. 23, 1888
391,596	Edison, T. A	Lights, incandescent	Oct. 23, 1888
391,605	Hall, E. J	Conductors	Oct. 23, 1888
391,720	Pratt, H. P	Medical and surgical, body-wear	Oct. 23, 1888
391,761	Nutting, S. E	Lights, arc, gravity feed, clutch	Oct. 23, 1888
391,762	Scribner, C. E	Telephones, systems	Oct. 23, 1888
391,783	Connelly, W. A	Thermostats	Oct. 30, 1888
391,792	Heysinger, I. W	Locomotion	Oct. 30, 1888
391,793	Heysinger, I. W	do	Oct. 30, 1888
391,797	Hyer, W. E	Motors	Oct. 30, 1888
391,815	Packard, J. W	Lights, filaments and carbons	Oct. 30, 1888
391,816	Packard, J. W	do	Oct. 30, 1888
391,820	Rossney, W. C. and Hunt, C. L	Printing, delivering	Oct. 30, 1888
391,831	Amet, E. H	Balances	Oct. 30, 1888
391,839	Davis, E	Telephones, calls	Oct. 30, 1888
391,853	McDill, H. C	Cut-outs, electro-magnetic	Oct. 30, 1888
391,855	Ongley, C. E	Circuit-closers	Oct. 30, 1888
391,917	Randall, J. D	do	Oct. 30, 1888
391,923	Slattery, M. M. M	Lighting, systems	Oct. 30, 1888
391,943	Bryant, W. C	Cut-outs, mechanical	Oct. 30, 1888
391,954	Field, S. D	Regulators	Oct. 30, 1888
391,969	Himmer, V	Clocks, electric	Oct. 30, 1888
392,018	Emerson, V. H	Galvanometers	Oct. 30, 1888
392,033	Jacques, W. W	Telephones, systems	Oct. 30, 1888
392,034	Johnson, O. B	Cut-outs, mechanical	Oct. 30, 1888
392,080	Stout, G. H	Batteries, secondary	Oct. 30, 1888
392,090	Zipernowsky, C., Déri, M. and Bláthy, O. T.	Systems of distribution	Oct. 30, 1888
392,103	Campbell, H. F	Conductors, anti-inductive	Oct. 30, 1888
392,114	Fraley, G. B.	Systems of distribution	Oct. 30, 1888
392,127	Love, J. C.	Locomotion	Oct. 30, 1888
392,158	Lemp, H	Lights, incandescent	Oct. 30, 1888
392,159	Lemp, H	Lights, filaments and carbons	Oct. 30, 1888
392,167	Roberts, I. L	Regulators	Oct. 30, 1888
392,213	McElroy, W. J	System of distribution	Nov. 6, 1888
392,228	Russell, C. W	Drop-lights and hangers	Nov. 6, 1888
392,230	Scales, W. S.	Clocks, electric	Nov. 6, 1888
392,233	Shaver, G. F	Telephones, mechanical	Nov. 6, 1888
392,244	Walter, H	Batteries, secondary	Nov. 6, 1888
392,243	Wilson, J. C.	Telephones, systems	Nov. 6, 1888
392,301	Bailey, R. M	do	Nov. 6, 1888
392,326	Gould, C. C.	do	Nov. 6, 1888
392,370	Sellon, R. P. and Mordey, W. M	Regulators	Nov. 6, 1888
392,385	Weston, E	Galvanometers	Nov. 6, 1888
392,386	Weston, E	do	Nov. 6, 1888
392,387	Weston, E	do	Nov. 6, 1888
392,393	Young, J. C	Lights, arc, gravity feed, clutch	Nov. 6, 1888
392,400	Belfield, R	Applications, general	Nov. 6, 1888
392,403	Blake, F	Telephones, systems	Nov. 6, 1888
392,437	Lange, P	Meters	Nov. 6, 1888
392,438	Lange, P	do	Nov. 6, 1888
392,439	Lange, P	do	Nov. 6, 1888
392,440	Lehman, J. H	Igniting devices	Nov. 6, 1888
392,443	Long, M. W	Railway signals	Nov. 6, 1888
392,444	Long, M. W	do	Nov. 6, 1888
392,470	Stanley, W., jr	Motors	Nov. 6, 1888
392,471	Stanley, W., jr	do	Nov. 6, 1888
392,476	Weston, E	Galvanometers	Nov. 6, 1888
392,477	Weston, E	do	Nov. 6, 1888
392,478	Weston, E	do	Nov. 6, 1888
392,490	Billings, C. E	Magneto-electric	Nov. 6, 1888
392,513	Heisler, C	Systems of distribution	Nov. 6, 1888
392,520	McTighe, J. J	Lights, filaments and carbons	Nov. 6, 1888
392,531	Amet, E. H	Recorders	Nov. 6, 1888
392,573	Thompson, C. H	Batteries, secondary	Nov. 6, 1888
392,574	Thompson, C. H	do	Nov. 6, 1888
392,577	Wurts, A	Meters	Nov. 6, 1888
392,604	Hale, G. C., Barrett, A. and Zentner, J	Telegraphy, fire	Nov. 13, 1888
392,633	Perkins, C. G	Cut-outs, mechanical	Nov. 13, 1888
392,641	Slocum, E. L	Telegraphy, fire	Nov. 13, 1888
392,660	Bidwell, B	Magneto-electric	Nov. 13, 1888
392,664	Chase, H. A	Locomotion	Nov. 13, 1888
392,665	Cleverly, H. A	Igniting devices	Nov. 13, 1888
392,666	Coad, T	Lights, sockets and keys	Nov. 13, 1888
392,675	Hunter, R. M	Locomotion	Nov. 13, 1888

No.	NAME.	CLASS.	DATE.
392,679	Lee, G. M.	Valve controllers	Nov. 13, 1888
392,686	Paekard, J. W.	Air and gas pumps, mechanical	Nov. 13, 1888
392,698	Smith, W. R. and Washburn, A. L.	Spring scales	Nov. 13, 1888
392,701	Thaxter, G. E.	Igniting devices	Nov. 13, 1888
392,724	Farnham, I. H.	Cut-outs, electro-magnetic	Nov. 13, 1888
392,736	Kotyra, M.	Incrustation	Nov. 13, 1888
392,757	Ries, E. E.	Locomotion	Nov. 13, 1888
392,765	Thomson, E.	Magneto-electric	Nov. 13, 1888
392,766	Trafford, W.	Annunciators	Nov. 13, 1888
392,772	Allen, O.	Locomotion	Nov. 13, 1888
392,775	Barrett, J. A.	Conductors, anti-inductive	Nov. 13, 1888
395,816	Mellet, L.	Telephones, mechanical	Nov. 13, 1888
392,826	Sellon, J. S.	Batteries, secondary	Nov. 13, 1888
392,832	Talbot, C. N.	Telegraphy, fire	Nov. 13, 1888
392,836	Wallace, J. B.	Batteries, galvanic	Nov. 13, 1888
392,838	Wilson, J. C.	Recorders	Nov. 13, 1888
392,843	Bergmann, S.	Telephones, supports	Nov. 13, 1888
392,855	Coburn, E. B.	Regulators	Nov. 13, 1888
392,863	Heywood, B.	Locomotion	Nov. 13, 1888
392,890	Stanley, W., jr.	Regulators	Nov. 13, 1888
392,914	Field, S. D.	Telegraphy, multiplex	Nov. 13, 1888
392,930	Patten, F. J.	Motors	Nov. 13, 1888
392,953	Herrington, G. H.	Phonographs	Nov. 13, 1888
392,967	Patten, F. J.	Locomotion	Nov. 13, 1888
392,970	Ritchie, F.	Annunciators	Nov. 13, 1888
392,971	Robbins, I.	Locomotion	Nov. 13, 1888
393,012	Kames, J.	do	Nov. 20, 1888
393,013	Kames, J.	do	Nov. 20, 1888
393,029	Poitevent, A.	Insulating materials	Nov. 20, 1888
393,040	Thomson, E.	Girders and columns	Nov. 20, 1888
393,072	Marquand, A. J.	Incrustation	Nov. 20, 1888
393,073	McElroy, W. J. and McTighe, T. J.	Systems of distribution	Nov. 20, 1888
393,078	Rosbach, W. F.	Annunciators	Nov. 20, 1888
393,088	Waterhouse, A. G.	Galvanometers	Nov. 20, 1888
393,123	Root, F. H.	Batteries, galvanic	Nov. 20, 1888
393,125	Schulte, W.	Applications, general	Nov. 20, 1888
393,132	Wagner, F. C.	Meters	Nov. 20, 1888
393,146	Edmunds, H.	Batteries, secondary, applications	Nov. 20, 1888
393,147	Edmunds, H.	do	Nov. 20, 1888
393,159	Kronenberg, E.	Clocks, electric	Nov. 20, 1888
393,165	Lockwood, T. D.	Telephones, anti-induction devices	Nov. 20, 1888
393,170	McMurray, L.	Electro-deposition	Nov. 20, 1888
393,183	Stocker, W. F.	Batteries, secondary, applications	Nov. 20, 1888
393,192	Thayer, R.	Applications, general	Nov. 20, 1888
393,203	Bartley, L. C.	Batteries, galvanic	Nov. 20, 1888
393,224	Field, S. D.	Locomotion	Nov. 20, 1888
393,237	Irving, J. I.	Station indicators	Nov. 20, 1888
393,243	Ker, J. B. and Crawford, J.	Telephones, systems	Nov. 20, 1888
393,266	Riker, A. L.	Magneto-electric	Nov. 20, 1888
393,271	Shaw, N. H.	Extinguishers, gas	Nov. 20, 1888
393,275	Van Depoele, C. J.	Locomotion	Nov. 20, 1888
393,276	Van Depoele, C. J.	do	Nov. 20, 1888
393,277	Van Depoele, C. J.	do	Nov. 20, 1888
393,278	Van Depoele, C. J.	do	Nov. 20, 1888
393,280	Weems, D. G.	do	Nov. 20, 1888
393,282	Wildt, E. A.	Magnetic locks and bolts	Nov. 20, 1888
393,304	Haskins, C. H.	Igniting devices	Nov. 20, 1888
393,315	Stocker, W. F.	Meters	Nov. 20, 1888
393,317	Van Depoele, C. J.	Locomotion	Nov. 20, 1888
393,323	Condict, G. H.	do	Nov. 20, 1888
393,325	Favre, J. C. J. C.	Spring scales	Nov. 20, 1888
393,337	Lane, F. A.	Electro-magnetic	Nov. 20, 1888
393,346	Whelan, J.	Conductors, underground	Nov. 20, 1888
393,348	Atkins, C. H.	Separators	Nov. 27, 1888
393,353	Brewer, H. J.	Batteries, galvanic	Nov. 27, 1888
393,365	Griseom, W. W.	Cut-outs, mechanical	Nov. 27, 1888
393,373	Keller, F. J. and Carnes, J. W.	Motors	Nov. 27, 1888
393,389	Paine, W. J.	Applications, tools and machines	Nov. 27, 1888
393,391	Ram, G. S.	Lights, filaments and carbons	Nov. 27, 1888
393,395	Roosevelt, H. L.	Batteries, galvanic	Nov. 27, 1888
393,396	Scribner, C. E.	Valve-controllers	Nov. 27, 1888
393,402	Smith, A. C.	Show boxes and cards	Nov. 27, 1888
393,405	Turner, D. B.	Lights, arc, gravity feed, clutch	Nov. 27, 1888
393,422	Craig, T. E.	Magneto-electric	Nov. 27, 1888
393,431	Griggs, A. C.	Railway signals	Nov. 27, 1888
393,447	Pfannkuche, G.	Lights, arc, gravity feed, gear-clutch	Nov. 27, 1888
393,448	Pfannkuche, G.	Regulators	Nov. 27, 1888

No.	NAME.	CLASS.	DATE.
393,469	Griscom, W. W	Magneto-electric	Nov. 27, 1888
393,470	Griscom, W. W	Batteries, secondary, applications	Nov. 27, 1888
393,473	Johnson, E. H	Cut-outs, thermal	Nov. 27, 1888
393,477	Lake, W	Stone and brick making	Nov. 27, 1888
393,508	Kellogg, M. G	Telephones, systems	Nov. 27, 1888
393,509	Kellogg, M. G	do	Nov. 27, 1888
393,525	Shaw, N. H	Igniting devices	Nov. 27, 1888
393,526	Smith, E. L	Electrolysis	Nov. 27, 1888
393,529	Vansize, H. B	Telephones, systems	Nov. 27, 1888
393,558	Harms, C. F	Circuit closers	Nov. 27, 1888
393,572	Paget, L	Locomotion	Nov. 27, 1888
393,573	Paget, L	Batteries, secondary	Nov. 27, 1888
393,574	Paget, L	Lights, arc, gravity feed, clutch	Nov. 27, 1888
393,575	Paget, L	Batteries, secondary	Nov. 27, 1888
393,576	Paget, L	do	Nov. 27, 1888
393,577	Paget, L	do	Nov. 27, 1888
393,578	Paget, L	Salines	Nov. 27, 1888
393,590	Smith, D. W	Cut-outs, mechanical	Nov. 27, 1888
393,596	Westinghouse, G., jr	Valves, steam-actuated	Nov. 27, 1888
393,612	Brown, C. W	Telephones, systems	Nov. 27, 1888
393,622	Dallas, M	Locomotion	Nov. 27, 1888
393,624	Durieux, C	Applications, general	Nov. 27, 1888
393,625	Durieux, C	do	Nov. 27, 1888
393,636	Freeman, W. P	Magneto-electric	Nov. 27, 1888
393,637	Gerry, J. H	Clocks, electric	Nov. 27, 1888
393,639	Gethins, J. L	Batteries, galvanic	Nov. 27, 1888
393,644	Hermann, S	Insulating materials	Nov. 27, 1888
393,657	Packer, R. and Cochran, I. E., jr	Alarms, burglar	Nov. 27, 1888
393,704	Heimann, S	Lamp chimneys	Nov. 27, 1888
393,710	Lüngen, A	Bells	Nov. 27, 1888
393,711	Lüngen, A	Magnetic locks and bolts	Nov. 27, 1888
393,733	Wollin, W. F. and Werline, E. H	Lights, sockets and keys	Nov. 27, 1888
393,741	Collins, W. C	Medical and surgical, body-wear	Dec. 4, 1888
393,742	Collins, W. C	Magneto-electric	Dec. 4, 1888
393,744	Currie, S. C. C	Batteries, secondary, applications	Dec. 4, 1888
393,745	Daft, L	Magneto-electric	Dec. 4, 1888
393,749	Fisher, F. E	Locomotion	Dec. 4, 1888
393,751	France, J. R	Celluloid	Dec. 4, 1888
393,752	France, J. R	do	Dec. 4, 1888
393,755	Griscom, W. W	Metal-working, miscellaneous	Dec. 4, 1888
393,756	Griscom, W. W	Systems of distribution	Dec. 4, 1888
393,757	Griscom, W. W	Batteries, secondary, applications	Dec. 4, 1888
393,814	Burns, P. C	Batteries, galvanic	Dec. 4, 1888
393,823	Flotron, E. and De LaBastie, F. B. A. R	Conductors, underground	Dec. 4, 1888
393,824	Goodridge, W. M	Telephones, switch-boards	Dec. 4, 1888
393,828	Hall, A. E	Applications, general	Dec. 4, 1888
393,838	Kiel, W	Miscellaneous compositions	Dec. 4, 1888
393,849	Nutting, S. E	Magneto-electric	Dec. 4, 1888
393,865	Stitzel, F. and Weinedel, C	Railway signals	Dec. 4, 1888
393,887	Couche, J	Winding bobbins, wet-wind	Dec. 4, 1888
393,954	Woodward, H	Batteries, secondary	Dec. 4, 1888
393,955	Woodward, H	do	Dec. 4, 1888
393,998	McLaughlin, J. F	Bells	Dec. 4, 1888
394,015	Salisbury, W. S	Locomotion	Dec. 4, 1888
394,035	Van Depoele, C. J	Regulators	Dec. 4, 1888
394,036	Van Depoele, C. J	Motors	Dec. 4, 1888
394,037	Van Depoele, C. J	Locomotion	Dec. 4, 1888
394,038	Van Depoele, C. J	do	Dec. 4, 1888
394,039	Van Depoele, C. J	do	Dec. 4, 1888
394,049	Bassford, W. K. and Maynard, E. B	Time checks	Dec. 4, 1888
394,062	Daft, L	Locomotion	Dec. 4, 1888
394,075	Lugo, O	Motors	Dec. 4, 1888
394,081	Patten, F. J. and Bingham, T. A	Annunciators	Dec. 4, 1888
394,090	Woodward, H	Batteries, thermal	Dec. 4, 1888
394,095	Buckingham, C. L	Magneto-electric	Dec. 4, 1888
394,100	Currie, S. C. C	Batteries, secondary, applications	Dec. 4, 1888
394,139	Short, S. H	Locomotion	Dec. 4, 1888
394,153	Chisholm, D. J	Drop lights and hangers	Dec. 11, 1888
394,161	Dulles, W., jr	Locomotion	Dec. 11, 1888
394,164	Farmer, J. S	Circuit closers	Dec. 11, 1888
394,172	Gray, E	Magneto-electric, hand-machines	Dec. 11, 1888
394,173	Griffith, A. and Burbank, H. A	Telephones, switches	Dec. 11, 1888
394,180	Heisler, C	Cut-outs, mechanical	Dec. 11, 1888
394,192	Macbeth, J	Blasting and fuses	Dec. 11, 1888
394,195	Maxwell, G. S	Telephones, systems	Dec. 11, 1888
394,203	Moldenke, R. G. G	Drills	Dec. 11, 1888
394,207	Paige, D. O	Conductors, underground	Dec. 11, 1888

No.	NAME.	CLASS.	DATE.
394,218	Smith, J. A	Organs	Dec. 11, 1888
394,220	Sparrow, F. M	Thermostats	Dec. 11, 1888
394,221	Steffens, M. J	Printing and vignetting	Dec. 11, 1888
394,230	Vail, T. N. and Seely, J. A	Telephones, systems	Dec. 11, 1888
394,296	Rand, E. R	Batteries, galvanic	Dec. 11, 1888
394,302	Sheffield, G. V	Telegraphy, printing	Dec. 11, 1888
394,307	Sparrow, F. M	Thermostats	Dec. 11, 1888
394,332	Cadwallader, B	Applications, general	Dec. 11, 1888
394,380	Lloyd, E. L	Insulators	Dec. 11, 1888
394,413	Soley, W. H	Thermostats	Dec. 11, 1888
394,417	Van Depoele, C. J	Motors	Dec. 11, 1888
394,471	Duncan, L	Batteries, secondary	Dec. 11, 1888
394,472	Duncan, L	do	Dec. 11, 1888
394,473	Duncan, L	do	Dec. 11, 1888
394,474	Duncan, L	do	Dec. 11, 1888
394,485	Griscom, W. W	Cut-outs, electro-magnetic	Dec. 11, 1888
394,491	Johns, J. H	Alarms	Dec. 11, 1888
394,520	Thornycroft, J. I	Indicators	Dec. 11, 1888
394,525	Van Depoele, C. J	Motors	Dec. 11, 1888
394,541	Latshaw, Z	Batteries, secondary, applications	Dec. 11, 1888
394,555	Clark, W. C	Annunciators	Dec. 18, 1888
394,562	Dutton, C. N	Oscillating meters	Dec. 18, 1888
394,563	Easton, L. F	Thermostats	Dec. 18, 1888
394,568	Griscom, W. W	Cut-outs, mechanical	Dec. 18, 1888
394,613	Roberts, I. L	Batteries, galvanic	Dec. 18, 1888
394,614	Roberts, I. L. and Brevoort, H. L	do	Dec. 18, 1888
394,615	Roberts, I. L	do	Dec. 18, 1888
394,616	Roberts, I. L	do	Dec. 18, 1888
394,617	Roberts, I. L	do	Dec. 18, 1888
394,621	Smith, M. H	Locomotion	Dec. 18, 1888
394,627	Widdifield, W. P. and Bowman, A. H	Car brakes	Dec. 18, 1888
394,638	Brevoort, H. L. and Roberts, I. L	Batteries, galvanic	Dec. 18, 1888
394,642	Conant, T. P	Batteries, secondary, applications	Dec. 18, 1888
394,648	Harris, T. W	Traction, underground	Dec. 18, 1888
394,670	Wright, R. D	Batteries, galvanic	Dec. 18, 1888
394,680	Dawes, A	Drop-lights and hangers	Dec. 18, 1888
394,697	Jamieson, P. F	Relays and sounders	Dec. 18, 1888
394,728	Shallenberger, O. B	Galvanometers	Dec. 18, 1888
394,734	Stevens, W. L	Gearing	Dec. 18, 1888
394,735	Stevens, W. L	Locomotion	Dec. 18, 1888
394,784	Milliken, G. F	Telegraphy, fire	Dec. 18, 1888
394,791	Scheffbauer, R	Lights, arc, positive feed, gear-clutch	Dec. 18, 1888
394,797	Tregoning, J	Magneto-electric	Dec. 18, 1888
394,807	Bacon, A. H	Medical and surgical, body-wear	Dec. 18, 1888
394,810	Beattie, J., jr	Batteries, galvanic	Dec. 18, 1888
394,818	Bradley, C. S	Magneto-electric	Dec. 18, 1888
394,819	Bradley, C. S	do	Dec. 18, 1888
394,832	Casey, J. F	Telephones, systems	Dec. 18, 1888
394,833	Casey, J. F	do	Dec. 18, 1888
394,834	Cleeve, H. F. and Parker, J	Soda-water apparatus	Dec. 18, 1888
394,837	De Ferranti, S. Z	Connectors	Dec. 18, 1888
394,838	De Ferranti, S. Z	do	Dec. 18, 1888
394,839	Denio, W. L	Telegraphy, fire, alarms and extinguishers	Dec. 18, 1888
394,880	Reckenzaun, A. and Pentz, J. A	Meters	Dec. 18, 1888
394,881	Reckenzaun, A	do	Dec. 18, 1888
394,883	Reithmann, G. W	Magneto-electric	Dec. 18, 1888
394,887	Short, S. H	Locomotion	Dec. 18, 1888
394,892	Thomson, E	Heaters	Dec. 18, 1888
394,897	Wiegand, H. H	Batteries, secondary	Dec. 18, 1888
394,905	Belding, W. S	Magneto-electric	Dec. 18, 1888
394,914	Durant, G. F. and Bailey, H. L	Telephones, systems	Dec. 18, 1888
394,925	Hoyt, A. J	Telegraphy, circuit-closers	Dec. 18, 1888
394,946	Wood, J. B	Telephones, calls	Dec. 18, 1888
394,951	Balsley, U. H	Telephones, systems	Dec. 25, 1888
394,952	Baxter, W., jr	Applications, tools and machines	Dec. 25, 1888
394,958	Colling, S	Medical and surgical, body-wear	Dec. 25, 1888
394,960	Dewey, M. W	Telegraphy, automatic	Dec. 25, 1888
394,961	Dewey, M. W	Circuits and systems	Dec. 25, 1888
394,964	Farnham, I. H	Telephones, switch-boards	Dec. 25, 1888
394,978	Hauss, D. J	Magneto-electric	Dec. 25, 1888
394,999	Rice, E. W., jr	do	Dec. 25, 1888
395,018	Thomson, E	Meters	Dec. 25, 1888
395,019	Von Hefner-Alteneck, F. and Hoffman, C	Magneto-electric	Dec. 25, 1888
395,028	Bailey, M. and Warner, J	Batteries, galvanic	Dec. 25, 1888
395,083	Siemens, W	Miscellaneous compositions	Dec. 25, 1888
395,096	Watson, A	Alarms	Dec. 25, 1888
395,101	Wilson, J. C	Telegraphy, fire	Dec. 25, 1888

No.	NAME.	CLASS.	DATE.
395,102	Wilson, J. C.	Telegraphy, fire.	Dec. 25, 1888
395,111	Barnes, W. A.	Telegraphy, fire, alarms and extinguishers	Dec. 25, 1888
395,112	Barnes, W. A.	do	Dec. 25, 1888
395,116	Bergmann, S.	Rheostats	Dec. 25, 1888
395,123	Edison, T. A.	Magneto-electric	Dec. 25, 1888
395,130	Given, J. L.	Railways, pneumatic	Dec. 25, 1888
395,137	Hayes, H. V.	Telephones, systems	Dec. 25, 1888
395,151	Laurence, A.	Advertising, automatic devices	Dec. 25, 1888
395,157	Loomis, F. F.	Magneto-electric	Dec. 25, 1888
395,163	Meloon, I. L. and Whiting, P. S.	Railway signals	Dec. 25, 1888
395,170	Perkins, E. A. and Stuart, D. C.	Railways, pneumatic	Dec. 25, 1888
395,187	Smith, W. B.	Boats, buoys and safes	Dec. 25, 1888
395,201	Barber, A. M. and Gabriel, C.	Belt shifters	Dec. 25, 1888
395,207	Bowen, C. H.	Conductors, insulators	Dec. 25, 1888
395,215	Davies, D. H. and Tourtel, J. M.	Lighting systems	Dec. 25, 1888
395,260	Belding, W. S.	Magneto-electric	Dec. 25, 1888
395,299	Sweet, D. F.	Motors	Dec. 25, 1888
395,311	Cameron, H. F. DeB.	Batteries, secondary	Jan. 1, 1889
395,315	Coleman, J. P.	Railway signals	Jan. 1, 1889
395,317	Dubéy, E. A.	Advertising, signs	Jan. 1, 1889
395,357	Scales, W. S.	Clocks, electric	Jan. 1, 1889
395,377	Brush, C. F.	Batteries, secondary, applications	Jan. 1, 1889
395,378	Brush, C. F.	do	Jan. 1, 1889
395,379	Brush, C. F.	do	Jan. 1, 1889
395,399	Mast, L. L.	Lightning rods	Jan. 1, 1889
395,421	Cockburn, A. C.	Cut-outs, thermal	Jan. 1, 1889
395,427	Delany, P. B.	Telegraphy, automatic	Jan. 1, 1889
395,442	Jennings, B.	Locomotiou	Jan. 1, 1889
395,476	Blake, F.	Telephones, electric	Jan. 1, 1889
395,492	Gartner, A.	Regulators	Jan. 1, 1889
395,508	Patten, F. J.	Telegraphy, multiplex	Jan. 1, 1889
395,509	Patten, F. J.	do	Jan. 1, 1889
395,510	Patten, F. J.	do	Jan. 1, 1889
395,524	Thayer, R.	Applications, tools and machines	Jan. 1, 1889
395,533	Woods, G. T.	Cut-outs, electro-magnetic	Jan. 1, 1889
395,546	Conner, W. A.	Conductors	Jan. 1, 1889
395,556	Field, S. D.	Telegraphy, multiplex	Jan. 1, 1889
395,575	Marvin, H. N.	Motors	Jan. 1, 1889
395,584	Phipps, E. H.	Conductors, underground	Jan. 1, 1889
395,609	Brangs, P. H.	Cut-outs, mechanical	Jan. 1, 1889
395,613	Dewey, M. W.	Telegraphy, reed	Jan. 1, 1889
395,614	Dewey, M. W.	Telegraphy, printing	Jan. 1, 1889
395,622	Kelly, J. F.	Magneto-electric	Jan. 1, 1889
395,667	Smith, D. G.	Railway signals	Jan. 1, 1889
395,682	Ambler, A. I.	Car brakes	Jan. 8, 1889
395,703	Jenkins, W. F.	Locomotion	Jan. 8, 1889
395,706	Kitsee, I.	Batteries, galvanic	Jan. 8, 1889
395,748	Kent, J. W. and Orr, R.	Thermostats	Jan. 8, 1889
395,755	Pawlowski, J.	Lights, arc, special features	Jan. 8, 1889
395,761	Trott, S.	Locomotion	Jan. 8, 1889
395,769	Coad, T.	Batteries, galvanic	Jan. 8, 1889
395,773	Emerson, E.	Electro-deposition	Jan. 8, 1889
395,781	Hollerith, H.	Indicators	Jan. 8, 1889
395,782	Hollerith, H.	do	Jan. 8, 1889
395,783	Hollerith, H.	do	Jan. 8, 1889
395,835	Kookogey, W. P.	Batteries, galvanic	Jan. 8, 1889
395,836	Kookogey, W. P.	Batteries, secondary, applications	Jan. 8, 1889
395,837	Kookogey, W. P.	Batteries, galvanic	Jan. 8, 1889
395,851	Schwartz, L. H. A.	Cordage, warping	Jan. 8, 1889
395,862	Winslow, G. E.	Indicators	Jan. 8, 1889
395,873	Coffin, C. L.	Heaters	Jan. 8, 1889
395,932	Waite, H. E.	Induction-coils	Jan. 8, 1889
395,936	Wightman, M. J.	Lighting systems	Jan. 8, 1889
395,950	Capek, J. V.	Heaters	Jan. 8, 1889
395,953	Dewey, M. W.	Telegraphy, fire	Jan. 8, 1889
395,959	Dewey, M. W.	do	Jan. 8, 1889
395,961	Dyer, R. N.	Locomotion	Jan. 8, 1889
395,962	Edison, T. A.	Lights, incandescant	Jan. 8, 1889
395,963	Edison, T. A.	Lights, filaments and carbons	Jan. 8, 1889
395,974	Hayes, H. V. and White, A. C.	Galvanometers	Jan. 8, 1889
396,009	Thomson, E.	Heaters	Jan. 8, 1889
396,010	Thomson, E.	do	Jan. 8, 1889
396,011	Thomson, E.	do	Jan. 8, 1889
396,012	Thomson, E.	do	Jan. 8, 1889
396,013	Thomson, E.	do	Jan. 8, 1889
396,014	Thomson, E.	do	Jan. 8, 1889
396,015	Thomson, E.	do	Jan. 8, 1889

No.	NAME.	CLASS.	DATE.
396,039	Thomson, E	Heaters	Jan. 8, 1889
396,086	Hoffmann, C	Magneto-electric	Jan. 15, 1889
396,121	Tesla, N	Motors	Jan. 15, 1889
396,124	Wells, C. H	Locomotion	Jan. 15, 1889
396,146	Dean, G. H	Lamp shades	Jan. 15, 1889
396,149	Eickemeyer, R	Magneto-electric	Jan. 15, 1889
396,155	Hale, F. W	Piano attachments	Jan. 15, 1889
396,156	Hale, F. W	Exercising devices	Jan. 15, 1889
396,176	Simpson, D. J	Connectors	Jan. 15, 1889
396,195	Daft, L	Magneto-electric	Jan. 15, 1889
396,196	Daft, L	Locomotion	Jan. 15, 1889
396,199	Fiske, B. A	Ordinance, electrical appliances	Jan. 15, 1889
396,207	Henion, W	Railway signals	Jan. 15, 1889
396,212	Long, J. V	Medical and surgical, body-wear	Jan. 15, 1889
396,213	Lugo, O	Batteries, secondary, applications	Jan. 15, 1889
396,214	Lugo, O	do	Jan. 15, 1889
396,241	Shawhan, J. F	Lighting systems	Jan. 15, 1889
396,269	Coerper, C	Motors	Jan. 15, 1889
396,270	Coffin, C. L	Heaters	Jan. 15, 1889
396,310	Van Depoele, C. J	Locomotion	Jan. 15, 1889
396,311	Van Depoele, C. J	do	Jan. 15, 1889
396,312	Van Depoele, C. J	do	Jan. 15, 1889
396,313	Van Depoele, C. J	do	Jan. 15, 1889
396,314	Van Depoele, C. J	Motors	Jan. 15, 1889
396,325	Brin, A. and L. Q	Paper-making, bleaching	Jan. 15, 1889
396,329	D'Humy, P. R. De F	Batteries, galvanic	Jan. 15, 1889
396,334	Gilson, S. H	Conductors, insulators	Jan. 15, 1889
396,342	Scheithaner, B	Batteries, galvanic	Jan. 15, 1889
396,355	Dyer, I. T	Magneto-electric	Jan. 15, 1889
396,356	Edison, T. A	Separators	Jan. 15, 1889
396,365	Paul, W. C. and Kleinstaub, O. D	Railway signals	Jan. 15, 1889
396,367	Roberts, I. L	Batteries, secondary	Jan. 15, 1889
396,368	Roberts, I. L	do	Jan. 15, 1889
396,369	Roberts, I. L	do	Jan. 15, 1889
396,385	Arbogast, C. and Kunzler, J. W	Telegraphy, fire, alarms and extinguishers	Jan. 22, 1889
396,403	Jacquemier, M. J. R	Meters	Jan. 22, 1889
396,407	Lynch, J	Conductors, underground	Jan. 22, 1889
396,422	Pfannkuche, G	Regulators	Jan. 22, 1889
396,439	Sperry, E. A	Cut-outs, electro-magnetic	Jan. 22, 1889
396,450	Zoeller, T. J	Telegraphy, fire	Jan. 22, 1889
396,465	Carey, G. H. and Mac Arthur, W	Telegraphy, relays and sounders	Jan. 22, 1889
396,543	Cobb, H. B	Connectors	Jan. 22, 1889
396,549	Dickerson, E. N., jr	Systems of distribution	Jan. 22, 1889
396,557	Gmür, B. and Platz, O	Magneto-electric, hand-machines	Jan. 22, 1889
396,579	Loomis, O. P	Cut-outs, thermal	Jan. 22, 1889
396,580	Loomis, O. P	Regulators	Jan. 22, 1889
396,581	Loomis, O. P	Magneto-electric	Jan. 22, 1889
396,582	Loomis, O. P	Systems of distribution	Jan. 22, 1889
396,583	Loomis, O. P	Lights, sockets and keys	Jan. 22, 1889
396,602	Rice, E. W., jr	Regulators	Jan. 22, 1889
396,603	Rice, E. W., jr., and Rohrer, A. L	Systems of distribution	Jan. 22, 1889
396,618	Short, S. H	Locomotion	Jan. 22, 1889
396,632	Waters, B. E	Cut-outs, mechanical	Jan. 22, 1889
396,633	Weems, D. G	Locomotion	Jan. 22, 1889
396,645	Card, G. F	Meters	Jan. 22, 1889
396,649	Davidson, W	Railways, turn-tables	Jan. 22, 1889
396,667	Robbins, A. C	Alarms, burglar	Jan. 22, 1889
396,681	Brush, C. F	Batteries, secondary, applications	Jan. 29, 1889
396,701	Lehy, G. B	Alarms, burglar	Jan. 29, 1889
396,723	Beers, C. B	Magnetic locks and bolts	Jan. 29, 1889
396,725	Blades, H. H	Regulators	Jan. 29, 1889
396,734	Dewey, M. W	Telegraphy, multiplex	Jan. 29, 1889
396,748	Kookogey, W. P	Railway signals	Jan. 29, 1889
396,749	Kookogey, W. P	do	Jan. 29, 1889
396,750	Kookogey, W. P	do	Jan. 29, 1889
396,769	Sellon, J. S	Batteries, secondary	Jan. 29, 1889
396,770	Sellon, J. S	do	Jan. 29, 1889
396,786	Wagner, G. G	Registers	Jan. 29, 1889
396,791	Whittingham, G. H	Motors	Jan. 29, 1889
396,792	Williams, J. T	Locomotion	Jan. 29, 1889
396,795	Young, J	Anunciators	Jan. 29, 1889
396,836	Shawhan, J. F	Heaters	Jan. 29, 1889
396,847	Ashen, P	Conductors, insulators	Jan. 29, 1889
396,867	Grant, P	Regulators	Jan. 29, 1889
396,870	Heinrichs, C. F	Batteries, galvanic	Jan. 29, 1889
396,871	Heinrichs, C. F	do	Jan. 29, 1889
396,880	Knowles, E. R	Cut-outs, mechanical	Jan. 29, 1889

No.	NAME.	CLASS.	DATE.
396,897	Siegrist, A.	Drop-lights and hangers	Jan. 29, 1889
396,920	Chamberlain, J. C.	Cut-outs, thermal	Jan. 29, 1889
396,932	Holt, A. J.	Regulators	Jan. 29, 1889
396,933	Hulford, W. J.	Refrigerators	Jan. 29, 1889
396,940	Knowles, E. R.	Cut-outs, electro-magnetic	Jan. 29, 1889
396,941	Knowles, E. R.	Magneto-electric	Jan. 29, 1889
396,942	Knowles, E. R.	do	Jan. 29, 1889
396,951	Packard, J. W.	Photometers	Jan. 29, 1889
396,958	Sellon, J. S.	Batteries, secondary	Jan. 29, 1889
396,983	Cade, B.	Telegraphy, railway-car	Jan. 29, 1889
397,006	Kester, J. F.	Regulators	Jan. 29, 1889
397,007	Kester, J. F.	Magneto-electric	Jan. 29, 1889
397,049	Cade, B.	Railway signals	Jan. 29, 1889
10,980	Locke, S. D.	(Reissue of 355,185.) Paving, gutters	Jan. 29, 1889
397,109	Bussmann, O. S.	Cut-outs, mechanical	Feb. 5, 1889
397,111	Colby, E. J.	Batteries, galvanic	Feb. 5, 1889
397,116	Egan, C. E.	do	Feb. 5, 1889
397,171	Crosby, E. H.	Telegraphy, fire, alarms and extinguishers	Feb. 5, 1889
397,176	Ferdinand, A. B.	Telephones, calls	Feb. 5, 1889
397,194	Martin, M.	Telegraphy, fire	Feb. 5, 1889
397,218	Bergmann, S.	Lights, incandescent, special features	Feb. 5, 1889
397,221	Callender, W. M.	Conductors, underground	Feb. 5, 1889
397,235	Hunter, R. M.	Batteries, secondary	Feb. 5, 1889
397,260	Wellens, R.	Valve-controllers	Feb. 5, 1889
397,270	Boda, A. Z.	Railway signals	Feb. 5, 1889
397,284	Griffith, A. and Burbank, H. A.	Telephones, calls	Feb. 5, 1889
397,295	Kearney, J. G.	Dynamometers	Feb. 5, 1889
397,300	Mack, W. B.	Conductors, underground	Feb. 5, 1889
397,320	Ward, J. G.	Electro-deposition	Feb. 5, 1889
397,331	Barrett, J. A.	Telephones, anti-induction devices	Feb. 5, 1889
397,340	Cohen, R. L.	Magneto-electric	Feb. 5, 1889
397,364	Holcombe, A. G.	Annunciators	Feb. 5, 1889
397,385	Phelps, W. S.	Railways, traction, underground	Feb. 5, 1889
397,392	Shallenberger, O. B.	Magneto-electric	Feb. 5, 1889
397,398	Spiegel, W. G.	Store-service, vending apparatus	Feb. 5, 1889
397,407	Webster, W., jr.	Electrolysis	Feb. 5, 1889
397,418	Crandall, J. E.	Telegraphy, lightning arresters	Feb. 5, 1889
397,423	Greaves, J.	Applications, general	Feb. 5, 1889
397,424	Griscom, W. W. and Weidner, H. N.	Connectors	Feb. 5, 1889
397,439	Patten, F. J.	Motors	Feb. 5, 1889
397,443	Shaw, W. A.	Batteries, secondary	Feb. 5, 1889
397,451	Van Depoele, C. J.	Locomotion	Feb. 5, 1889
397,461	Guttman, L.	Induction-coils	Feb. 5, 1889
397,466	McCoy, A. T.	Telegraphy, printing	Feb. 5, 1889
397,472	Seymour, J. B.	Stationery, paper clips	Feb. 5, 1889
397,474	Stanley, L. T.	Electrodes	Feb. 5, 1889
397,479	Vandegrift, J. A.	Lights, incandescent	Feb. 5, 1889
397,489	Clamer, F. J. and Hendrickson, J. G.	Batteries, galvanic	Feb. 12, 1889
397,492	Eickemeyer, R.	Magneto-electric	Feb. 12, 1889
397,526	Thompson, C. M.	Batteries, galvanic	Feb. 12, 1889
397,537	Conner, E. G.	Knitting and netting, stopping	Feb. 12, 1889
397,533	Cutler, H. H.	Meters	Feb. 12, 1889
397,548	Hoffmann, C. G.	Telethermometers	Feb. 12, 1889
397,550	Hunter, R. M.	Magneto-electric	Feb. 12, 1889
397,553	Johnston, W. C., jr.	Connectors	Feb. 12, 1889
397,557	Knowles, E. R.	Batteries, secondary	Feb. 12, 1889
397,594	Holley, W. A. and Malin, W.	Grain meters	Feb. 12, 1889
397,607	Paget, L.	Batteries, secondary	Feb. 12, 1889
397,608	Paget, L.	do	Feb. 12, 1889
397,613	Rice, E. W., jr.	Regulators	Feb. 12, 1889
397,616	Thomson, E.	do	Feb. 12, 1889
397,650	Kingsland, W.	Batteries, secondary	Feb. 12, 1889
397,657	Meyer, E.	Alarms	Feb. 12, 1889
397,678	Wilson, F.	Theatrical appliances	Feb. 12, 1889
397,702	Dennison, J. F.	Motors	Feb. 12, 1889
397,705	Edison, T. A.	Magneto-electric	Feb. 12, 1889
397,715	Hammer, W. J.	Cut-outs, mechanical	Feb. 12, 1889
397,729	Knowles, E. R.	do	Feb. 12, 1889
397,754	Rheiner, H. S.	Lights, filaments and carbons	Feb. 12, 1889
397,773	Blades, H. H.	Regulators	Feb. 12, 1889
397,790	Fear, F.	Medical and surgical, body-wear	Feb. 12, 1889
397,796	Gibson, C. D. P.	Batteries, secondary	Feb. 12, 1889
397,806	Johnson, W. G.	Medical and surgical, body-wear	Feb. 12, 1889
397,817	Patten, F. J.	Motors	Feb. 12, 1889
397,826	Andrews, A. E.	Cut-outs, mechanical	Feb. 12, 1889
397,830	Caughey, R. C.	Railways, traction	Feb. 12, 1889
397,838	Denio, W. L.	Telegraphy, circuit-closers	Feb. 12, 1889

No.	NAME.	CLASS.	DATE.
397,857	Hunter, R. M.	Heaters	Feb. 12, 1889
397,875	Sprague, F. J.	Locomotion	Feb. 12, 1889
397,880	Toulmin, M.	Railway gates, electric	Feb. 12, 1889
397,906	Galvin, J. A.	Lighting systems	Feb. 19, 1889
397,910	Gutmann, L.	Induction-coils	Feb. 19, 1889
397,945	Sperry, E. A.	Batteries, galvanic	Feb. 19, 1889
397,953	Wood, M. M.	Drop-lights and hangers	Feb. 19, 1889
397,965	Buruley, W.	Batteries, galvanic	Feb. 19, 1889
397,966	Carey, W. A.	Galvanometers	Feb. 19, 1889
397,969	Cross, E. D.	Batteries, galvanic	Feb. 19, 1889
397,975	De Redou, C. F.	Vending apparatus	Feb. 19, 1889
397,977	Dressler, C. E.	Telegraphy, automatic	Feb. 19, 1889
397,992	Merkel, G. H.	Chemicals, metalloids	Feb. 19, 1889
398,025	Brown, W. C.	Insulators	Feb. 19, 1889
398,035	Dieuleveult, U.	Telegraphy, circuits and systems	Feb. 19, 1889
398,045	Hermite, E., Paterson, E. J. and Cooper, C. F.	Paper-making, bleaching	Feb. 19, 1889
398,069	Nagle, A. F.	Alarms	Feb. 19, 1889
398,075	Pedersen, J. T.	Batteries, secondary	Feb. 19, 1889
398,101	Webster, W., jr.	Electrolysis	Feb. 19, 1889
398,121	Bergmann, S.	Rheostats	Feb. 19, 1889
398,122	Birdsall, E. T.	Friction generators	Feb. 19, 1889
398,132	Cross, E. D.	Batteries, galvanic	Feb. 19, 1889
398,133	De Baun, S.	Medical and surgical, body-wear	Feb. 19, 1889
398,144	Geary, J.	Alarms, burglar	Feb. 19, 1889
398,194	Timmis, I. A.	Batteries, secondary	Feb. 19, 1889
398,209	Weis, F. J.	Street cars, steam	Feb. 19, 1889
398,222	Brill, J. A.	Locomotion	Feb. 19, 1889
398,272	Mestern, M.	Batteries, thermal	Feb. 19, 1889
398,276	Pierce, A. M.	Advertising, automatic devices	Feb. 19, 1889
398,288	Stirling, C. C.	Cut-outs, mechanical	Feb. 19, 1889
398,294	Van Depoele, C. J.	Railways, underground	Feb. 19, 1889
398,314	Currier, H. L.	Valve controllers	Feb. 19, 1889
398,327	De Vars, H. A. B. H.	Medical and surgical, baths	Feb. 19, 1889
398,353	Stitzel, F. and Weiuedel, C.	Railways, pneumatic	Feb. 19, 1889
10,986	Belfield, R. (Reissue of 392,400)	Applications, general	Feb. 19, 1889
398,402	Hunter, R. M.	Locomotion	Feb. 26, 1889
398,409	Lang, E. M.	Batteries, secondary	Feb. 26, 1889
398,414	Lieb, C. A.	Railways, pneumatic	Feb. 26, 1889
398,420	McCarthy, L. A.	Alarms, burglar	Feb. 26, 1889
398,441	Patterson, W. R.	Conductors	Feb. 26, 1889
398,442	Patterson, W. R.	do	Feb. 26, 1889
398,456	Rumely, W. N.	Steam engines, speed governors, centrifugal	Feb. 26, 1889
398,457	Shallenberger, O. B.	Motors	Feb. 26, 1889
398,458	Shallenberger, O. B.	do	Feb. 26, 1889
398,489	Brady, T. H.	Locomotion	Feb. 26, 1889
398,498	Dahl, O.	do	Feb. 26, 1889
398,510	Hill, W. S.	Cut-outs, mechanical	Feb. 26, 1889
398,519	Lynde, F. C.	Spring scales	Feb. 26, 1889
398,520	Lynde, F. C.	do	Feb. 26, 1889
398,521	Lynde, F. C.	do	Feb. 26, 1889
398,560	Weller, F. A. and Rietzel, A. F.	Cut-outs, mechanical	Feb. 26, 1889
398,561	Weller, F. A. and Rietzel, A. F.	do	Feb. 26, 1889
398,566	Wright, W. H. S.	Cut-outs, thermal	Feb. 26, 1889
398,577	Bowman, A. H. and Widdifield, W. P.	Car brakes	Feb. 26, 1889
398,613	Hayden, H., jr. and Desant, W. F. Z.	Railway signals	Feb. 26, 1889
398,614	Healy, C. L.	Telegraphy, dynamo	Feb. 26, 1889
398,661	Short, S. H.	Locomotion	Feb. 26, 1889
398,662	Short, S. H.	do	Feb. 26, 1889
398,663	Short, S. H.	do	Feb. 26, 1889
398,668	Sperry, E. A.	Regulators	Feb. 26, 1889
398,713	Enos, J. A.	Indicators	Feb. 26, 1889
398,731	James, J. W.	Medical and surgical, baths	Feb. 26, 1889
398,737	Kookogey, W. P.	Batteries, galvanic	Feb. 26, 1889
398,744	Nutting, S. E.	Regulators	Feb. 26, 1889
398,769	Currie, S. C. C.	Connectors	Feb. 26, 1889
398,774	Edison, T. A.	Lights, incandescent	Feb. 26, 1889
398,794	Patten, F. J.	Motors	Feb. 26, 1889
398,805	Steinhilber, A.	Igniting devices, automatic	Feb. 26, 1889
398,814	Blake, H. T.	Locomotion	Mar. 5, 1889
398,833	Higgins, F. H. W.	Telegraphy, printing	Mar. 5, 1889
398,836	Lieb, C. A.	Railways, pneumatic	Mar. 5, 1889
398,870	Wood, J. J.	Lights, arc, special features	Mar. 5, 1889
398,896	Kahan, S. and Craven, A. W.	Time alarms	Mar. 5, 1889
398,906	Silvey, W. L.	Lights, arc, gravity feed, gear	Mar. 5, 1889
398,907	Silvey, W. L.	Lights, arc, gravity feed, gear-clutch	Mar. 5, 1889
398,912	Thomson, E.	Heaters	Mar. 5, 1889
398,913	Thomson, E.	Magneto-electric	Mar. 5, 1889

No.	NAME.	CLASS.	DATE.
398,914	Thomson, E	Heaters	Mar. 5, 1889
398,926	Balet, J. W	Regulators	Mar. 5, 1889
398,927	Balet, J. W	do	Mar. 5, 1889
398,963	Heysinger, I. W	Locomotion	Mar. 5, 1889
399,016	Butterworth, A. W	Telephones, mechanical	Mar. 5, 1889
399,019	Coffin, C. L	Heaters	Mar. 5, 1889
399,052	Knowles, E. R	Batteries, secondary	Mar. 5, 1889
399,054	Lane, G. M	Lights, arc, gravity feed, gear-clutch	Mar. 5, 1889
399,057	Lecoultrre, I. E	Telegraphy, circuit-closers	Mar. 5, 1889
399,059	Lugo, O	Motors	Mar. 5, 1889
399,084	Schmalz, J. B. and Faulkner, J. B	Electrodes	Mar. 5, 1889
399,088	Silvey, W. L	Magneto-electric	Mar. 5, 1889
399,091	Smith, H. W	Locomotion	Mar. 5, 1889
399,092	Smith, H. W	do	Mar. 5, 1889
399,128	Brainerd, F. W	Clocks, electric	Mar. 5, 1889
399,134	Dillon, L. W	Cut-outs, mechanical	Mar. 5, 1889
399,135	Dillon, L. W	do	Mar. 5, 1889
399,137	Dyer, R. N	Locomotion	Mar. 5, 1889
399,147	Kester, J. F	Regulators	Mar. 5, 1889
399,154	O'Neil, J	Telegraphy, automatic	Mar. 5, 1889
399,155	Palmer, H. J	Railway signals	Mar. 5, 1889
399,163	Ricketson, J. C	Indicators	Mar. 5, 1889
399,165	Smith, D. W	Steam boilers, circulation	Mar. 5, 1889
399,168	Tag, W. and Smith, S. C	Igniting devices, manual	Mar. 5, 1889
399,192	Gill, O. A	Sack scales	Mar. 5, 1889
399,198	Johnson, W. S	Steam engines, triple-expansion	Mar. 5, 1889
399,209	Rae, J. H	Amalgamators, electric	Mar. 5, 1889
399,213	Robertson, J. H	Magneto-electric	Mar. 5, 1889
399,218	Stillwell, L. B	Systems of distribution	Mar. 5, 1889
399,219	Stillwell, L. B	do	Mar. 5, 1889
399,224	Wagner, F. C	Regulators	Mar. 5, 1889
399,228	Hopkins, G. I	Telegraphy, railway-car	Mar. 5, 1889
10,989	Vansize, W. B	(Reissue of 393,529) Telephones, systems	Mar. 5, 1889
399,236	Blair, J. B	Locomotion	Mar. 12, 1889
399,269	Kelly, J. W	Telephones, switch-boards	Mar. 12, 1889
399,274	Meserole, A. V	Batteries, secondary	Mar. 12, 1889
399,291	Siemens, W	Conductors, lead-covered	Mar. 12, 1889
399,292	Siemens, W	Galvanometers	Mar. 12, 1889
399,305	Wilson, C. H	Cut-outs, thermal	Mar. 12, 1889
399,314	Burnley, W	Telegraphy, circuits and systems	Mar. 12, 1889
399,320	Du Laney, G. L	Magneto-electric	Mar. 12, 1889
399,326	Griggs, A. C	Connectors	Mar. 12, 1889
399,328	Hayes, J. A	Magneto-electric	Mar. 12, 1889
399,329	Heywood, B	do	Mar. 12, 1889
399,331	Hull, W. S. and Anderson, J. C	Railway signals	Mar. 12, 1889
399,334	Keller, C. M	Drop-lights and hangers	Mar. 12, 1889
399,336	Lauckert, E. F. H. H	Meters	Mar. 12, 1889
399,341	McFeely, R. F. and Potter, H. V	Applications, tools and machines	Mar. 12, 1889
399,343	Penney, W. L. and Little, T	Conductors, underground	Mar. 12, 1889
399,372	Bradley, C. S	Locomotion	Mar. 12, 1889
399,375	Burden, J. A	Separators	Mar. 12, 1889
399,377	Carty, J. J	Anti-induction devices	Mar. 12, 1889
399,400	Harvey, W. B	Cut-outs, electro-magnetic	Mar. 12, 1889
399,401	Higham, D	Regulators	Mar. 12, 1889
399,402	Higham, D	do	Mar. 12, 1889
399,403	Higham, D	Magneto-electric	Mar. 12, 1889
399,404	Higham, D	do	Mar. 12, 1889
399,409	Hunter, R. M	Locomotion	Mar. 12, 1889
399,416	Kronenberg, E	Igniting devices, manual	Mar. 12, 1889
399,474	Benjamin, F. P	Railway signals	Mar. 12, 1889
399,497	Cassidy, J. C	Lights, incandescent, special features	Mar. 12, 1889
399,505	Dudley, W. J	Telephones, calls	Mar. 12, 1889
399,507	Eddy, A. H	Motors	Mar. 12, 1889
399,534	Hicks, T. H	Systems of distribution	Mar. 12, 1889
399,535	Huber, J. L	Batteries, secondary	Mar. 12, 1889
399,549	Olsen, T	Testing machines	Mar. 12, 1889
399,550	Paiste, H. T	Cut-outs, mechanical	Mar. 12, 1889
399,556	Putnam, T. A. B	Railway signals	Mar. 12, 1889
399,579	Stitzel, F. and Weinedel, C	do	Mar. 12, 1889
399,591	Williams, P. G. and Roovers, A. W	Applications, general	Mar. 12, 1889
399,599	Condict, G. H	Locomotion	Mar. 12, 1889
399,635	Shaver, G. F	Telephones, mechanical	Mar. 12, 1889
399,639	Westinghouse, G., jr	System of distribution	Mar. 12, 1889
399,646	Balet, J. W	Magneto-electric	Mar. 19, 1889
399,666	Hitchcock, C. A	Telephones, electric	Mar. 19, 1889
399,716	Whittier, C	Applications, tools and machines	Mar. 19, 1889
399,732	Blake, E	Locomotion	Mar. 19, 1889

No.	NAME.	CLASS.	DATE.
399,738	Cannan, J. J.	Telegraphy, fire, alarms and extinguishers	Mar. 19, 1889
399,748	Egan, C. E.	Lights, sockets and keys	Mar. 19, 1889
399,755	King, F.	Batteries, secondary, applications	Mar. 19, 1889
399,786	Schardt, B. and Jones, G.	Lights, arc, special features	Mar. 19, 1889
399,800	Thomson, E.	Magneto-electric	Mar. 19, 1889
399,801	Thomson, E. and Wightman, M. J.	Motors	Mar. 19, 1889
399,822	Blades, H. H.	do	Mar. 19, 1889
399,826	Brooks, A. A.	Conductors	Mar. 19, 1889
399,876	Graydon, J. W.	Shell fuses	Mar. 19, 1889
399,879	Graydon, J. W.	do	Mar. 19, 1889
399,881	Graydon, J. W.	Shells	Mar. 19, 1889
399,882	Van Depoele, C. J.	Locomotion	Mar. 19, 1889
399,954	Warrell, N.	Medical and surgical, body-wear	Mar. 19, 1889
400,011	Rogers, T. B. and Bartlett, S. H.	Game apparatus	Mar. 19, 1889
400,028	Woodring, W. H. and Gilbert, C. S.	Alarms	Mar. 19, 1889
400,038	Bentley, E. M.	Locomotion	Mar. 26, 1889
400,050	Bunker, I. S.	Annunciators	Mar. 26, 1889
400,088	Kammeyer, C. E. F.	Batteries, galvanic	Mar. 26, 1889
400,126	Shaw, F.	do	Mar. 26, 1889
400,130	Silvey, W. L.	Magneto-electric	Mar. 26, 1889
400,139	Stewart, R. E.	do	Mar. 26, 1889
400,140	Stockly, G. W.	Lamps	Mar. 26, 1889
400,141	Stone, R. C.	Transmitters	Mar. 26, 1889
400,179	Bentley, E. M.	Locomotion	Mar. 26, 1889
400,180	Bentley, E. M.	do	Mar. 26, 1889
400,181	Bentley, E. M.	do	Mar. 26, 1889
400,182	Bentley, E. M.	do	Mar. 26, 1889
400,198	Edwards, E. A.	Lights, arc, positive feed, gear-clutch	Mar. 26, 1889
400,209	Haskins, D. G.	Hydraulic motors, rotary	Mar. 26, 1889
400,214	Horne, W. L.	Lights, systems and appliances	Mar. 26, 1889
400,215	Imschenetzky, A.	Batteries, galvanic	Mar. 26, 1889
400,224	Kitsee, I.	do	Mar. 26, 1889
400,225	Kitsee, I.	do	Mar. 26, 1889
400,226	Kitsee, I.	Batteries, secondary	Mar. 26, 1889
400,227	Kitsee, I.	Batteries, galvanic	Mar. 26, 1889
400,232	Lehman, J. H.	Telegraphy, circuit closers	Mar. 26, 1889
400,235	Liebert, E. and Rosenthal, S. A.	do	Mar. 26, 1889
400,239	McKinney, J. Y.	Alarms, burglar	Mar. 26, 1889
400,245	Neu, G. S.	Steam valves, throttle	Mar. 26, 1889
400,264	Sperry, E. A.	Telegraphy, fire	Mar. 26, 1889
400,274	Van Depoele, C. J.	Gearing	Mar. 26, 1889
400,283	Adams, H. R.	Time checks	Mar. 26, 1889
400,300	Chase, H. A.	Locomotion	Mar. 26, 1889
400,304	Colby, E. J.	Annunciators	Mar. 26, 1889
400,308	Cranmer, W. C. and Arnold, S. W.	Conductors, underground	Mar. 26, 1889
400,311	Davis, E. H. and Westervelt, R.	Motors	Mar. 26, 1889
400,312	Davis, E. H. and Westervelt, R.	Thermostats	Mar. 26, 1889
400,315	Dobbie, R. S.	Regulators	Mar. 26, 1889
400,317	Edison, T. A.	Separators	Mar. 26, 1889
400,325	Ginochio, N. B.	Telephones, magnetic	Mar. 26, 1889
400,326	Ginochio, N. B.	Telephones, calls	Mar. 26, 1889
400,327	Ginochio, N. B.	Magneto-electric, hand-machines	Mar. 26, 1889
400,352	Miller, W. H.	Lights, arc, gravity feed, clutch	Mar. 26, 1889
400,366	Sedgwick, F.	Tempering and annealing, applications	Mar. 26, 1889
400,375	Van Depoele, C. J.	Locomotion	Mar. 26, 1889
400,378	Weston, E.	Lights, incandescent	Mar. 26, 1889
400,395	Currie, S. C. C.	Batteries, secondary, applications	Mar. 26, 1889
400,404	Huuter, R. M.	Batteries, secondary	Mar. 26, 1889
400,430	Crosby, E. H.	Batteries, galvanic	Apr. 2, 1889
400,463	Law, M. D.	Lightning arresters	Apr. 2, 1889
400,464	Lawshe, S. R.	Lightning rods	Apr. 2, 1889
400,473	Moore, A. T., jr. and Fitch, H. A.	Lights, incandescent, special features	Apr. 2, 1889
400,476	Nutting, S. E.	Lights, arc, gravity feed, gear-clutch	Apr. 2, 1889
400,479	Parke, J. G.	Igniting devices, manual	Apr. 2, 1889
400,486	Rice, E. W., jr.	Systems of distribution	Apr. 2, 1889
400,492	Rousseau, D.	Igniting devices, manual	Apr. 2, 1889
400,515	Thomson, E.	Systems of distribution	Apr. 2, 1889
400,516	Thomson, E.	do	Apr. 2, 1889
400,520	Tuttle, C. R.	Telephones, supports	Apr. 2, 1889
400,523	Van Rysselberghe, F.	Telegraphy, reed	Apr. 2, 1889
400,525	Waddell, W. H.	Railway signals	Apr. 2, 1889
400,552	Donaldson, R. S.	Conductors	Apr. 2, 1889
400,591	Morton, W. J.	Telephones, electric	Apr. 2, 1889
400,600	Rockwell, F. C.	Lights, incandescent, special features	Apr. 2, 1889
400,658	Gennert, E. F.	Gas setting	Apr. 2, 1889
400,661	Gipperich, A.	Galvanometers	Apr. 2, 1889
400,662	Gipperich, A.	do	Apr. 2, 1889

No.	NAME.	CLASS.	DATE.
400,663	Gipperich, A	Galvanometers	Apr. 2, 1889
400,664	Hall, C. M	Reducing and separating, aluminium	Apr. 2, 1889
400,665	Hall, C. M	do	Apr. 2, 1889
400,666	Hall, C. M	do	Apr. 2, 1889
400,667	Hall, C. M	do	Apr. 2, 1889
400,669	Hammer, W. J	Cut-outs, thermal	Apr. 2, 1889
400,680	Higham, D	Regulators	Apr. 2, 1889
400,692	Lane, G. M	Lights, arc, gravity feed, gear-clutch	Apr. 2, 1889
400,724	Ainslie, D. A	Locomotion	Apr. 2, 1889
400,725	Ainslie, D. A	do	Apr. 2, 1889
400,726	Balet, J. W	Regulators	Apr. 2, 1889
400,732	Bergmann, S	Cut-outs, mechanical	Apr. 2, 1889
400,733	Bergmann, S	do	Apr. 2, 1889
400,746	Conkling, G	Separators	Apr. 2, 1889
400,747	Conkling, G	do	Apr. 2, 1889
400,750	Cox, C. A. and J. F	Annunciators	Apr. 2, 1889
400,754	Debonteville, E. D. and Malandin, L. P. C	Air and gas engines, explosive	Apr. 2, 1889
400,764	Greene, P. R	Conductors, underground	Apr. 2, 1889
400,766	Hall, C. M	Reducing and separating, aluminium	Apr. 2, 1889
400,795	Root, F. H	Electro-magnets	Apr. 2, 1889
400,808	Turner, J. A	Cut-outs, mechanical	Apr. 2, 1889
400,809	Van Depoele, C. J	Motors	Apr. 2, 1889
400,830	Condict, G. H. and Angerer, V	Locomotion	Apr. 2, 1889
400,838	Entz, J. B	Magneto-electric	Apr. 2, 1889
400,842	Griscom, W. W	Batteries, secondary	Apr. 2, 1889
400,843	Griscom, W. W	do	Apr. 2, 1889
400,862	Lowrie, W. and Hall, C. J	Induction-coils	Apr. 2, 1889
400,866	Marshall, W	Condensers	Apr. 2, 1889
400,880	Street, S. T	Railway signals	Apr. 2, 1889
400,890	Bain, F	Motors	Apr. 9, 1889
400,911	Hall, P. E	Telephones, supports	Apr. 9, 1889
400,916	Hunter, R. M	Locomotion	Apr. 9, 1889
400,917	Iwanowski, A. C	Thermostats	Apr. 9, 1889
400,926	Lundell, R	Locomotion	Apr. 9, 1889
400,951	Robinson, M	Annunciators	Apr. 9, 1889
400,958	Seely, J. A	Conductors, underground	Apr. 9, 1889
400,969	Thayer, H. B	Telephones, systems	Apr. 9, 1889
400,971	Thomson, E	Motors	Apr. 9, 1889
400,972	Thomson, E	Induction-coils	Apr. 9, 1889
400,973	Thomson, E	Magneto-electric	Apr. 9, 1889
400,978	Watts, H. F	Heaters	Apr. 9, 1889
400,980	Weston, E	Galvanometers	Apr. 9, 1889
400,985	Willis, J. B	Annunciators	Apr. 9, 1889
401,006	Carranza, M. and Tinoco, J. M	Clocks, electric	Apr. 9, 1889
401,014	De Fignière, A	Insulating materials	Apr. 9, 1889
401,035	Kaselowsky, E	Telegraphy, circuit closers	Apr. 9, 1889
401,041	Lewin, J. J	Induction-coils	Apr. 9, 1889
401,059	Phalan, J. H	Batteries, galvanic	Apr. 9, 1889
401,065	Rabe, H	Clocks, electric	Apr. 9, 1889
401,067	Reilly, J. C	Telephones, switch-boards	Apr. 9, 1889
401,085	Thomson, E	Lightning arresters	Apr. 9, 1889
401,095	Wood, F. E	Lightning rods	Apr. 9, 1889
401,120	Bottomo, T. D	Lights, filaments and carbons	Apr. 9, 1889
401,152	Geary, J	Electro-magnets	Apr. 9, 1889
401,153	Geary, J	Igniting devices, automatic	Apr. 9, 1889
401,154	Gillette, G. H. and K. C	Conductors, underground	Apr. 9, 1889
401,155	Gillette, G. H. and K. C	do	Apr. 9, 1889
401,156	Gläser, H	Friction generators	Apr. 9, 1889
401,191	Manwaren, A. H	Meters	Apr. 9, 1889
401,200	Norris, W. E	Thermostats	Apr. 9, 1889
401,207	Randall, C. A	Motors, miscellaneous	Apr. 9, 1889
401,221	Short, S. H	Locomotion	Apr. 9, 1889
401,225	Smith, W. F	Meters	Apr. 9, 1889
401,226	Smith, W. F	do	Apr. 9, 1889
401,229	Trapp, E. A	Telescopes	Apr. 9, 1889
401,230	Van Depoele, C. J	Regulators	Apr. 9, 1889
401,231	Van Depoele, C. J	Motors	Apr. 9, 1889
401,244	Basel, J. C	Connectors	Apr. 9, 1889
401,255	Currie, S. C. C	Batteries, secondary, applications	Apr. 9, 1889
401,270	Griscom, W. W	Cut-outs, mechanical	Apr. 9, 1889
401,289	Main, W	Batteries, secondary	Apr. 9, 1889
401,290	Main, W	do	Apr. 9, 1889
401,291	Main, W	do	Apr. 9, 1889
401,296	Noyes, J. G	Bells	Apr. 9, 1889
401,304	Russell, C. W. and Drake, J. I	Drop lights and hangers	Apr. 9, 1889
401,317	Weston, E	Magneto-electric	Apr. 9, 1889
401,318	Weston, E	do	Apr. 9, 1889

No.	NAME.	CLASS.	DATE.
401,322	Wynne, F	Locomotion	Apr. 9, 1889
401,332	Currie, S. C. C	Batteries, secondary, applications	Apr. 16, 1889
401,334	Delany, P. B	Telegraphy, circuits and systems	Apr. 16, 1889
401,338	Farr, H. G	Alloys	Apr. 16, 1889
401,343	Gildemeyer, C. A	Wire fasteners	Apr. 16, 1889
401,348	Haight, H. J	Thermometers	Apr. 16, 1889
401,366	Osborn, C. V	Induction-coils	Apr. 16, 1889
401,394	Walsh, E., jr	Furnaces, accessories	Apr. 16, 1889
401,405	Benardos, N	Rheostats	Apr. 16, 1889
401,409	Brown, A. H	Water distribution, mains and pipes	Apr. 16, 1889
401,414	Conkling, G	Separators	Apr. 16, 1889
401,415	Conkling, G	do	Apr. 16, 1889
401,417	Cox, C. W. and Van Dyke, T. E	Lights, incandescent, special features	Apr. 16, 1889
401,423	Gipperich, A	Galvanometers	Apr. 16, 1889
401,444	Lemp, H. and Wightman, M. J	Lights, incandescent	Apr. 16, 1889
401,466	Sellon, J. S	Batteries, secondary	Apr. 16, 1889
401,472	Taylor, T	Railway signals	Apr. 16, 1889
401,482	Dewey, M. W	Heaters	Apr. 16, 1889
401,486	Edison, T. A	Lighting systems	Apr. 16, 1889
401,498	Johnson, E. H. and Greenfield, E. T	Conductors	Apr. 16, 1889
401,515	Reed, F. H	Locomotion	Apr. 16, 1889
401,518	Ross, H. S	Registers	Apr. 16, 1889
401,520	Tesla, N	Motors	Apr. 16, 1889
401,521	Walsh, E., jr	Alarms	Apr. 16, 1889
401,527	Whitney, E. R	Cut-outs, thermal	Apr. 16, 1889
401,580	Packard, J. W	Air and gas pumps, mechanical	Apr. 16, 1889
401,582	Packard, J. W	Valve controllers	Apr. 16, 1889
401,591	Riesenberg, H	Railway signals	Apr. 16, 1889
401,606	Thompson, E. P	Lights, filaments and carbons	Apr. 16, 1889
401,607	Thompson, E. P	do	Apr. 16, 1889
401,608	Thomson, E	Systems of distribution	Apr. 16, 1889
401,616	Wheeler, F.	Locomotion	Apr. 16, 1889
401,617	White, A. C	Galvanometers	Apr. 16, 1889
401,631	Benedict, G. H. and Farlong, P. M	Electrotyping	Apr. 16, 1889
401,632	Billberg, C. O. C	Magneto-electric	Apr. 16, 1889
401,639	Coffin, C. L	Heaters	Apr. 16, 1889
401,646	Edison, T. A	Lights, incandescent	Apr. 16, 1889
401,664	Steenbergh, G. C	Railway signals	Apr. 16, 1889
401,668	Weston, E	Magneto-electric	Apr. 16, 1889
401,669	Weston, E	do	Apr. 16, 1889
401,682	Brust, C.	Medical and surgical, body-wear	Apr. 16, 1889
401,688	Coats, C. C	Separators	Apr. 16, 1889
401,721	Sedgwick, F	Tempering and annealing, applications	Apr. 16, 1889
401,732	Candee, W. L	Telephones, details	Apr. 23, 1889
401,743	Gillett, W	Telephones, electric	Apr. 23, 1889
401,744	Griscom, W. W	Batteries, secondary	Apr. 23, 1889
401,761	Shawhan, J. F	Magneto-electric	Apr. 23, 1889
401,789	Nutter, F. H	Alarms, burglar	Apr. 23, 1889
401,796	Short, S. H	Locomotion	Apr. 23, 1889
401,797	Short, S. H	do	Apr. 23, 1889
401,801	Thompson, D. W	Valve controllers	Apr. 23, 1889
401,803	Thomson, E	Meters	Apr. 23, 1889
401,851	Parsons, H. W	Torpedoes	Apr. 23, 1889
401,882	Grimley, C. H	Medical and surgical, body-wear	Apr. 23, 1889
401,927	Brooks, D., jr	Conductors, underground	Apr. 23, 1889
401,936	Egleston, T	Conductors	Apr. 23, 1889
401,953	Kookogey, W. P	Batteries, secondary	Apr. 23, 1889
401,970	Sandwell, W. D	Locomotion	Apr. 23, 1889
402,006	Desmazures, C	Batteries, secondary	Apr. 23, 1889
402,007	Deweese, T. J	Conductors, underground	Apr. 23, 1889
402,027	Marshall, W	Condensers	Apr. 23, 1889
402,043	Stuart, J. M	Annunciators	Apr. 23, 1889
402,064	Christy, W	Locomotion	Apr. 23, 1889
402,066	Coerper, C	Magneto-electric	Apr. 23, 1889
402,080	Henderson, J. W	Locomotion	Apr. 23, 1889
402,084	Hunter, R. M	do	Apr. 23, 1889
402,099	Munier, C. J. A	Telegraphy, printing	Apr. 23, 1889
402,104	Pratt, R. J	Batteries, galvanic	Apr. 23, 1889
402,107	Ries, E. E	Heaters	Apr. 23, 1889
402,108	Ries, E. E	do	Apr. 23, 1889
402,117	Van Depoele, C. J	Locomotion	Apr. 23, 1889
402,120	Wilson, J. C	Recorders	Apr. 23, 1889
402,121	Woelk, E. A	Telephones, switches	Apr. 23, 1889
402,157	Gilman, C. C	Applications, general	Apr. 30, 1889
402,165	Kinsey, I	Bells	Apr. 30, 1889
402,166	Kookogey, W. P	Batteries, galvanic	Apr. 30, 1889
402,190	Prescott, G. B., jr	Batteries, secondary, applications	Apr. 30, 1889

No.	NAME.	CLASS.	DATE.
402,191	Prescott, G. B., jr.	Batteries, secondary, applications	Apr. 30, 1889
402,192	Prescott, G. B., jr.	do	Apr. 30, 1889
402,200	Statter, J. G.	Magneto-electric	Apr. 30, 1889
402,249	Kimball, J. L. and Wirt, H. C.	Cut-outs, thermal	Apr. 30, 1889
402,264	McCluer, C. E.	Telephones, systems	Apr. 30, 1889
402,290	Yeiser, F.	Motors	Apr. 30, 1889
402,298	Burnley, W.	Telegraphy, circuits and systems	Apr. 30, 1889
402,311	De Ferranti, S. Z.	Locomotion	Apr. 30, 1889
402,329	Jansen, A. M. J. and V. J. A. M.	Clocks, electric	Apr. 30, 1889
402,332	Knowlton, D. C.	Igniting devices, manual	Apr. 30, 1889
402,347	Patterson, W. R.	Thermostats	Apr. 30, 1889
402,349	Pfatisch, M.	Batteries, secondary, applications	Apr. 30, 1889
402,367	Van Dorn, W. L.	Medical and surgical, body-wear	Apr. 30, 1889
402,398	Carter, J. T.	Railways, automatic signals	Apr. 30, 1889
402,408	Crouch, F. J.	Telegraphy, railway-car	Apr. 30, 1889
402,410	Davis, D. L.	Meters	Apr. 30, 1889
402,414	Dewey, M. W.	Telegraphy, automatic	Apr. 30, 1889
402,415	Dewey, M. W.	do	Apr. 30, 1889
402,416	Dewey, M. W.	Heaters	Apr. 30, 1889
402,420	Doubleday, H. M. and R.	Lights, incandescent, special features	Apr. 30, 1889
402,481	Rockwell, F. C.	Lights, sockets and keys	Apr. 30, 1889
402,484	Schoop, P.	Batteries, secondary	Apr. 30, 1889
402,491	Thomas, B. F.	Medical and surgical, body-wear	Apr. 30, 1889
402,506	Carter, J. T.	Railway signals	Apr. 30, 1889
402,507	Chase, S. A.	Telegraphy, fire	Apr. 30, 1889
402,562	Coleman, J. P.	Railway signals	May 7, 1889
402,563	Colgate, A. E.	Conductors, underground	May 7, 1889
402,565	Cook, G. W.	do	May 7, 1889
402,586	Griscom, W. W.	Batteries, secondary	May 7, 1889
402,592	Heaviside, A. W.	Conductors, insulators	May 7, 1889
402,613	Rainey, W. K.	Bells	May 7, 1889
402,626	Smead, B.	Annunciators	May 7, 1889
402,639	Wilson, J. C.	Telegraphy, relays and sounders	May 7, 1889
402,642	Young, J.	Telegraphy, fire	May 7, 1889
402,671	Hicks, T. H.	Systems of distribution	May 7, 1889
402,683	Manning, C. E.	Advertising, signs	May 7, 1889
402,684	Maxim, H. S.	Separators	May 7, 1889
402,717	Burke, C. G.	Telegraphy, relays and sounders	May 7, 1889
402,752	Locke, F. M. and Lapp, J.	Conductors, insulators	May 7, 1889
402,753	Loomis, O. P.	Cut-outs, thermal	May 7, 1889
402,754	Loomis, O. P.	do	May 7, 1889
402,779	Steinhoff, A.	Valve controllers	May 7, 1889
402,810	Denver, W. J.	Anti-induction devices	May 7, 1889
402,823	Hammer, E. G.	Clocks, electric	May 7, 1889
402,828	Hopkins, G. I.	Telegraphy, circuit-closers	May 7, 1889
402,829	Hopkins, G. I.	Connectors	May 7, 1889
402,832	Hunter, R. M.	Locomotion	May 7, 1889
402,836	Jennings, B.	do	May 7, 1889
402,890	Bemis, S. A. and Pfingst, L.	Railway cars, trucks	May 7, 1889
402,904	Conkling, G.	Separators	May 7, 1889
402,912	Enrikín, J. B.	Rheostats	May 7, 1889
402,915	Friedländer, A.	Batteries, galvanic	May 7, 1889
402,928	Holcomb, F. A.	Recorders	May 7, 1889
402,929	Holcomb, F. A.	Telegraphy, transmitters	May 7, 1889
402,960	Moffatt, R. R.	Bells	May 7, 1889
402,971	Ries, E. E.	Systems of distribution	May 7, 1889
402,986	Shafer, E. B.	Telegraphy, fire	May 7, 1889
402,990	Silvey, W. L.	Motors	May 7, 1889
403,009	Van Depoele, C. J.	Locomotion	May 7, 1889
403,010	Van Depoele, C. J.	Connectors	May 7, 1889
403,011	Van Depoele, C. J.	Locomotion	May 7, 1889
403,017	Wheeler, S. S.	Regulators	May 7, 1889
403,018	Wheeler, S. S.	Magneto-electric	May 7, 1889
11,002	Noble, C. B.	(Reissue of 374,129) Lights, arc, gravity feed, clutch	May 7, 1889
403,092	Daft, L.	Locomotion	May 14, 1889
403,100	Grady, T. H.	Time alarms	May 14, 1889
403,104	Hatch, A. A.	Telephones	May 14, 1889
403,110	Johnson, G. B. and M.	Heaters	May 14, 1889
403,157	Thomson, E.	do	May 14, 1889
403,158	Walter, H. E.	Regulators	May 14, 1889
403,164	Wiest, J.	Capstans and windlasses	May 14, 1889
403,177	Buell, C. E.	Batteries, secondary, applications	May 14, 1889
403,180	De Mier, J. R.	Railway signals	May 14, 1889
403,192	Hunter, R. M.	Locomotion	May 14, 1889
403,193	Hunter, R. M.	do	May 14, 1889
403,211	Pratt, H. P.	Watch cases	May 14, 1889
403,244	Brillie, L.	Meters	May 14, 1889

No.	NAME.	CLASS.	DATE.
403,250	Cheever, J. D.	Separators	May 14, 1889
403,253	Collé, C.	Batteries, galvanic	May 14, 1889
403,256	Eames, H. H.	Separators	May 14, 1889
403,258	Field, S. D.	Telegraphy, reed	May 14, 1889
403,262	Garland, E. F.	Conductors, anti-inductive	May 14, 1889
403,267	Heimann, S.	Conductors	May 14, 1889
403,291	Robertson, J. H.	Telephones, systems	May 14, 1889
403,292	Robertson, J. H.	Telegraphy, circuits and systems	May 14, 1889
403,308	Thompson, E. P.	Connectors	May 14, 1889
403,311	Weston, E.	Galvanometers	May 14, 1889
403,312	Weston, E.	do	May 14, 1889
403,316	Adams, S. J.	Telephones, supports	May 14, 1889
403,345	Gish, J. L.	Rheostats	May 14, 1889
403,352	Lake, W.	Conductors, underground	May 14, 1889
403,374	Ries, E. E.	Heaters	May 14, 1889
403,376	Rogers, N. and Wharry, J. A.	Air and gas engines, explosive	May 14, 1889
403,379	Rogers, N. and Wharry, J. A.	do	May 14, 1889
403,380	Rogers, N. and Wharry, J. A.	do	May 14, 1889
403,397	Stewart, J.	Lights, sockets and keys	May 14, 1889
403,418	Colgate, A. E.	Conductors, underground	May 14, 1889
403,439	Nickerson, W. E.	Applications, tools and machines	May 14, 1889
403,440	Nickerson, W. E.	do	May 14, 1889
403,441	Nickerson, W. E.	do	May 14, 1889
403,442	Nickerson, W. E.	do	May 14, 1889
403,451	Barrett, J. A.	Batteries, galvanic	May 14, 1889
403,458	Carty, J. J.	Telephones, systems	May 14, 1889
403,472	Hotchkiss, Z. P.	Telegraphy, printing	May 14, 1889
403,482	O'Beirne, W. H.	Insulators	May 14, 1889
403,483	O'Connell, J. J.	Telephones, systems	May 14, 1889
403,484	Patterson, W. R.	Thermostats	May 14, 1889
403,487	Perret, F. A.	Magneto-electric	May 14, 1889
403,491	Smith, T. J.	Insulators	May 14, 1889
403,492	Smith, T. J.	Induction-coils	May 14, 1889
403,515	Casey, T. A.	Railway signals	May 21, 1889
403,517	Cole, F. W.	Electro-magnets	May 21, 1889
403,541	Lemp, H.	Induction-coils	May 21, 1889
403,549	Orford, J. M.	Locomotion	May 21, 1889
403,575	Conkling, G.	Separators	May 21, 1889
403,576	Conkling, G.	do	May 21, 1889
403,593	Jamieson, A.	Batteries, secondary	May 21, 1889
403,619	Steenbergh, G. C.	Railway signals	May 21, 1889
403,624	Thomas, W. R.	Separators	May 21, 1889
403,626	Van Epps, F. L.	Relays and sounders	May 21, 1889
403,630	Willson, T. L.	Magneto-electric	May 21, 1889
403,671	Houghton, D.	Lights, arc, positive feed, gear-clutch	May 21, 1889
403,691	Nickerson, W. E.	Applications, tools and machines	May 21, 1889
403,707	Thomson, E.	Heaters	May 21, 1889
403,708	Thomson, E.	do	May 21, 1889
403,727	Berrang, J. C.	Conductors, insulators	May 21, 1889
403,752	Hobbs, J. C.	Reducing and separating	May 21, 1889
403,754	Hunter, R. M.	Locomotion	May 21, 1889
403,776	Pope, E.	Telephones, calls	May 21, 1889
403,786	Speed, F. M.	Locomotion	May 21, 1889
403,800	Van Depoele, C. J.	do	May 21, 1889
403,801	Van Depoele, C. J.	do	May 21, 1889
403,802	Vetter, J. C.	Batteries, galvanic	May 21, 1889
403,825	Cole, C. B.	Conductors, underground	May 21, 1889
403,834	Gilman, W. H.	Music, self-playing instruments	May 21, 1889
403,836	Gravier, A. I.	Regulators	May 21, 1889
403,868	Arnold, D. J.	Batteries, galvanic	May 21, 1889
403,905	Blades, H. H.	Magneto-electric	May 28, 1889
403,937	Hilkier, C. F.	Thermostats	May 28, 1889
403,941	Knowles, E. R.	Cut-outs, electro-magnetic	May 28, 1889
403,944	Lehman, J. H.	Igniting devices, automatic	May 28, 1889
403,955	Noble, C. B.	Batteries, galvanic	May 28, 1889
403,957	Price, J. B.	Batteries, secondary	May 28, 1889
403,964	Silvey, W. L.	Lights, arc, positive feed	May 28, 1889
403,969	Streat, T.	Locomotion	May 28, 1889
403,972	Sturtevant, T. L.	Steam boilers, feeders	May 28, 1889
404,015	Nickerson, W. E.	Applications, tools and machines	May 28, 1889
404,033	Currier, H. L.	Telegraphy, circuit-closers	May 28, 1889
404,067	Belding, W. S.	Motors	May 28, 1889
404,068	Belding, W. S.	Magneto-electric	May 28, 1889
404,069	Belding, W. S.	Motors	May 28, 1889
404,112	Reinmann, A. L. and Lange, P.	Lights, filaments and carbons	May 28, 1889
404,114	Schmid, A.	Induction-coils	May 28, 1889
404,118	Smith, F. S.	Lights, filaments and carbons	May 28, 1889

No.	NAME.	CLASS.	DATE.
404,120	Stanley, W., jr	Regulators	May 28, 1889
404,139	Westinghouse, G., jr	Locomotion	May 28, 1889
404,149	Ainslie, D. A	do	May 28, 1889
404,154	Belfield, R	Lightning arresters	May 28, 1889
404,165	Burry, J	Telegraphy, circuits and systems	May 28, 1889
404,168	Cameron, H. F. De B. and Harris, T	Batteries, secondary	May 28, 1889
404,170	Coleman, J. P	Railway signals	May 28, 1889
404,221	Nickerson, W. E	Applications, tools and machines	May 28, 1889
404,226	Robbins, A. C	Telegraphy, fire	May 28, 1889
404,232	Snead, U	Girders and columns	May 28, 1889
404,244	Atwood, La M. C	Lights, arc, positive feed, gear-clutch	May 28, 1889
404,245	Atwood, La M. C	do	May 28, 1889
404,306	Ries, E. E	Heaters	May 28, 1889
404,310	Sellon, R. P	Meters	May 28, 1889
404,324	Van Depoele, C. J	Regulators	May 28, 1889
404,325	Van Depoele, C. J	Locomotion	May 28, 1889
404,332	Ball, C. M. and Norton, S	Separators	May 28, 1889
404,333	Ball, C. M. and Norton, S	do	May 28, 1889
404,334	Ball, C. M. and Norton, S	do	May 28, 1889
404,351	Fox, J. R	Lights, arc, gravity feed, clutch	May 28, 1889
404,361	McFeely, R. F	Applications, tools and machines	May 28, 1889
404,390	Dutton, A. L	Submarine lamps	June 4, 1889
404,426	Oehman, G. T	Telegraphy, printing	June 4, 1889
404,438	Ruddick, J. J	Telegraphy, fire	June 4, 1889
404,441	Shaw, H. F. and G. F	Locomotion	June 4, 1889
404,457	Wisner, A. J	Railway signals	June 4, 1889
404,463	Bottome, T. D	Lights, filaments and carbons	June 4, 1889
404,465	Bradley, C. S	Motors	June 4, 1889
404,466	Bradley, C. S	do	June 4, 1889
404,469	Cannel, W	Locomotion	June 4, 1889
404,470	Daft, L	Galvanometers	June 4, 1889
404,471	Drake, E. S	Telephones, details	June 4, 1889
404,484	Hochhausen, W	Magneto-electric	June 4, 1889
404,507	Shafer, E. B	Transmitters	June 4, 1889
404,518	Chase, S. A	Telegraphy, fire	June 4, 1889
404,519	Chase, S. A	do	June 4, 1889
404,533	Gartner, A	Motors	June 4, 1889
404,559	Priest, E. D	Locomotion	June 4, 1889
404,566	Shallenberger, O. B	Transmission of power	June 4, 1889
404,567	Shallenberger, O. B	do	June 4, 1889
404,600	Caspersson, C. A	Applications, general	June 4, 1889
404,602	Clark, E. P	Regulators	June 4, 1889
404,630	Kelly, J. F	Induction-coils	June 4, 1889
404,651	Paca, W. S	Motors	June 4, 1889
404,661	Slater, H. B	do	June 4, 1889
404,667	Woodhouse, D. A. and Foster, T. V	Applications, tools and machines	June 4, 1889
404,680	Brown, C. W	Telephones, supports	June 4, 1889
404,682	Cabell, S. G	Aging liquors	June 4, 1889
404,687	Daft, L	Locomotion	June 4, 1889
404,698	Frishmuth, W	Batteries, galvanic	June 4, 1889
404,699	Frishmuth, W	do	June 4, 1889
404,712	Kester, J. F	Magneto-electric	June 4, 1889
404,713	Kester, J. F	do	June 4, 1889
404,714	Kester, J. F	do	June 4, 1889
404,715	Kester, J. F	do	June 4, 1889
404,745	Taylor, E. C	Dentistry, miscellaneous	June 4, 1889
404,783	Gartner, A	Regulators	June 4, 1889
404,801	Slattery, M. M. M	Meters	June 4, 1889
404,813	Widdicombe, R. H	Connectors	June 4, 1889
404,816	Backstrom, C. A	Lights, incandescent	June 11, 1889
404,822	Brown, F. H	Induction-coils	June 11, 1889
404,850	Littlehales, G. H	Phonographs	June 11, 1889
404,859	Pfannkuche, G	Regulators	June 11, 1889
404,860	Pfannkuche, G	Galvanometers	June 11, 1889
404,861	Pfannkuche, G	do	June 11, 1889
404,866	Ricketson, J. C	Indicators	June 11, 1889
404,867	Ricketson, J. C	do	June 11, 1889
404,873	Short, S. H	Locomotion	June 11, 1889
404,877	Tailleur, G. E	Conductors, underground	June 11, 1889
404,893	Byrne, J. E	Applications, tools and machines	June 11, 1889
404,894	Byrne, J. E	do	June 11, 1889
404,895	Byrne, J. E	do	June 11, 1889
404,902	Edison, T. A	Conductors	June 11, 1889
404,906	Hadlock, W. E	Clocks, electric	June 11, 1889
404,913	Johns, H. W., jr	Conductors	June 11, 1889
404,959	Crowell, L. C	Printing, rotary	June 11, 1889
404,968	Griscom, W. W	Batteries, secondary, applications	June 11, 1889

No.	NAME.	CLASS.	DATE.
404,986	Rudolffy, J	Inhalers and respirators	June 11, 1889
405,002	Bishop, W. S	Magneto-electric	June 11, 1889
405,010	Byrne, J. E	Valve-controllers	June 11, 1889
405,045	Mowrer, M. L	Separators	June 11, 1889
405,089	Gerry, J. H	Clocks, electric	June 11, 1889
405,124	Schmid, A	Applications, general	June 11, 1889
405,126	Shaw, N. H	Igniting devices	June 11, 1889
405,151	Easton, L. F	Thermostats	June 11, 1889
405,170	Maxim, H. S	Lights, filaments and carbons	June 11, 1889
405,174	Pfannkuche, G	Regulators	June 11, 1889
405,176	Pratt, H. P	Medical and surgical, body-wear	June 11, 1889
405,187	Sperry, E. A	Drills	June 11, 1889
405,188	Sperry, E. A	Mining machines	June 11, 1889
405,194	Williams, J. T	Locomotion	June 11, 1889
405,196	Barrett, J. A	Batteries, galvanic	June 11, 1889
405,206	Dubinski, B	Time alarms	June 11, 1889
405,211	Haskins, C. D	Telegraphy, quadruplex	June 11, 1889
405,213	Hicks, T. H	Batteries, secondary	June 11, 1889
405,218	Loomis, O. P	Regulators	June 11, 1889
405,221	McKivitt, W. E	Telephones, systems	June 11, 1889
405,223	Perret, F. A	Motors	June 11, 1889
405,235	Wilson, J. C	Telegraphy, fire	June 11, 1889
405,239	Maxim, H. S	Lights, filaments and carbons	June 11, 1889
405,246	Childs, W. A	Batteries, galvanic	June 18, 1889
405,248	Dahl, O	Cut-outs, mechanical	June 18, 1889
405,249	Dahl, O	Meters	June 18, 1889
405,263	Lemp, H	Regulators	June 18, 1889
405,284	Thone, F	Magneto-electric	June 18, 1889
405,334	Waite, H. E	Friction generators	June 18, 1889
405,345	Coffin, C. L	Heaters	June 18, 1889
405,365	Lineff, A. L	Locomotion	June 18, 1889
405,382	Stromberg, A	Telephones, switches	June 18, 1889
405,399	Diehl, R. and P	Meters	June 18, 1889
405,420	Konigslow, H	Telephones, systems	June 18, 1889
405,427	Melaney, W. H	Lamps, shades	June 18, 1889
405,436	Shelton, W. J	Medical and surgical, body-wear	June 18, 1889
405,440	Sperry, E. A	Lights, arc, gravity feed, clutch	June 18, 1889
405,441	Sperry, E. A	Magneto-electric	June 18, 1889
405,452	Yale, C. O	Electro-deposition	June 18, 1889
405,461	Burbank, H. L	Telephones, systems	June 18, 1889
405,468	Flad, H	Locomotion	June 18, 1889
405,471	Gleeson, T	Magneto-electric	June 18, 1889
405,480	Hughes, T. V. and Chambers, C. R	Lights, filaments and carbons	June 18, 1889
405,507	Sandwell, W. D	Magneto-electric	June 18, 1889
405,515	Warde, G. H	Conductors, underground	June 18, 1889
405,519	Wuerpel, M	Railway signals	June 18, 1889
405,525	Braun, C. A	Telegraphy, circuit-closers	June 18, 1889
405,539	Dewey, M. W	Telegraphy, automatic	June 18, 1889
405,544	Fisher, F. E	Locomotion	June 18, 1889
405,546	Trist, R. P	Conductors	June 18, 1889
405,556	Hunter, R. M	Locomotion	June 18, 1889
405,566	Konigslow, O	Telephones, supports	June 18, 1889
405,572	Loomis, O. P	Lighting systems	June 18, 1889
405,576	Lynch, J	Conductors, underground	June 18, 1889
405,602	Rosenqvist, C. L	Magneto-electric	June 18, 1889
405,604	Rovello, A	Electrolysis	June 18, 1889
405,609	Serson, J	Batteries, galvanic	June 18, 1889
405,621	Taylor, C. W	Telegraphy, keys	June 18, 1889
405,626	Van Depoele, C. J	Locomotion	June 18, 1889
405,627	Van Depoele, C. J	do	June 18, 1889
405,628	Van Depoele, C. J	do	June 18, 1889
405,646	Zalinski, E. L. and Smith, H. J	Blasting fuses	June 18, 1889
405,647	Zalinski, E. L. and Smith, H. J	do	June 18, 1889
405,668	Hunter, R. M	Motors	June 18, 1889
405,677	Pickernell, F. A	Telephones, supports	June 18, 1889
405,684	Smith, H. J. and Zalinski, E. L	Blasting fuses	June 18, 1889
405,733	Griscom, W. W	Metal-working, miscellaneous	June 25, 1889
405,742	Orford, J. M	Lights, incandescent, special features	June 25, 1889
405,743	Robertson, J. H	Regulators	June 25, 1889
405,750	Van Depoele, C. J	Locomotion	June 25, 1889
405,751	Van Gestel, J. T	Batteries, secondary	June 25, 1889
405,767	Brewer, W. J	Locomotion	June 25, 1889
405,815	White, J. C	Railway signals	June 25, 1889
405,824	Bottom, T. D	Chlorination	June 25, 1889
405,831	Dewey, M. W	Telegraphy, fire	June 25, 1889
405,858	Tesla, N	Motors	June 25, 1889
405,859	Tesla, N	Transmission of power	June 25, 1889

No.	NAME.	CLASS.	DATE.
405,867	Beach, F. G	Telephones, systems	June 25, 1889
405,895	Leonard, H. W	Lighting systems	June 25, 1889
405,896	Leonard, H. W	do	June 25, 1889
405,897	Leonard, H. W. and Hanson, A	Batteries, secondary, applications	June 25, 1889
405,906	Pieper, H., fils	Lights, arc, positive feed, gear-clutch	June 25, 1889
405,964	Kinsman, F. E	Car brakes	June 25, 1889
405,970	Pearson, J. T	Lights, incandescent, special features	June 25, 1889
405,978	Allen, R. N	Locomotion	June 25, 1889
405,984	Burke, C. G	Telegraphy, automatic	June 25, 1889
405,985	Burke, C. G	Telegraphy, circuits and systems	June 25, 1889
405,986	Burke, C. G	Telegraphy, automatic	June 25, 1889
405,987	Burke, C. G	Relays and sounders	June 25, 1889
405,988	Burke, C. G	do	June 25, 1889
405,989	Burke, C. G	do	June 25, 1889
405,996	Griscom, W. W	Metal working, miscellaneous	June 25, 1889
406,010	Thomson, E	Meters	June 25, 1889
406,015	Willson, T. L	Magneto-electric	June 25, 1889

APPENDIX No. VIII.

PART III.

CONSISTING OF A

ALPHABETICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1. 1888, to June 30. 1889, inclusive, giving names of Inventors, numbers and dates of Patents, and the sub-class to which each belongs.

ALPHABETICAL INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1888, TO JUNE 30, 1889.

NO.	NAME.	CLASS.	DATE.
390,196	Acheson, E. G	Applications, general	Oct. 2, 1888
400,283	Adams, H. R	Time checks	Mar. 26, 1889
385,436	Adams, J. S. and Morrell, A. W	Lights, sockets and keys	July 3, 1888
391,351	Adams, J. S	Cut-outs, mechanical	Oct. 16, 1888
403,316	Adams, S. J	Telephones, supports	May 14, 1889
390,741	Adams, T. E	Conductors, insulators	Oct. 9, 1888
388,008	Ader, C	Circuits and systems	Aug. 21, 1888
400,724	Ainslie, D. A	Locomotion	Apr. 2, 1889
400,725	Ainslie, D. A	do	Apr. 2, 1889
404,149	Ainslie, D. A	do	May 28, 1889
392,772	Allen, O	do	Nov. 13, 1888
405,978	Allen, R. N	do	June 25, 1889
395,652	Ambler, A. I	Car brakes	Jan. 8, 1889
385,900	Amet, E. H	Recorders	July 10, 1888
387,842	Amet, E. H	do	Aug. 14, 1888
391,831	Amet, E. H	Balances	Oct. 30, 1888
392,531	Amet, E. H	Recorders	Nov. 6, 1888
397,826	Andrews, A. E	Cut-outs, mechanical	Feb. 12, 1889
387,131	Anthony, W. A	Galvanometers	July 31, 1888
389,352	Anthony, W. A	Motors	Sept. 11, 1888
396,385	Arbogast, C. and Kunzler, J. W	Telegraphy, fire, alarms and extinguishers	Jan. 22, 1889
403,868	Arnold, D. J	Batteries, galvanic	May 21, 1889
396,847	Ashen, P	Insulators	Jan. 29, 1889
389,186	Askew, C. B. and Pumpelly, J. K	Batteries, secondary	Sept. 11, 1888
393,348	Atkins, C. H	Separators	Nov. 27, 1888
404,244	Atwood, La M. C	Lights, arc, positive feed, gear-clutch	May 28, 1889
404,245	Atwood, La M. C	do	May 28, 1889
404,816	Backstrom, C. A	Lights, incandescent	June 11, 1889
394,807	Bacon, A. H	Medical and surgical, body-wear	Dec. 18, 1888
395,028	Bailey, M. and Warner, J	Batteries, galvanic	Dec. 25, 1888
392,301	Bailey, R. M	Telephones, systems	Nov. 6, 1888
400,890	Bain, F	Motors	Apr. 9, 1889
389,187	Baldwin, J. W	Medical and surgical, body-wear	Sept. 11, 1888
398,926	Balet, J. W	Regulators	Mar. 5, 1889
398,927	Balet, J. W	do	Mar. 5, 1889
399,646	Balet, J. W	Magneto-electric	Mar. 19, 1889
400,726	Balet, J. W	Regulators	Apr. 2, 1889
404,332	Ball, C. M. and Norton, S	Separators	May 28, 1889
404,333	Ball, C. M. and Norton, S	do	May 28, 1889
404,334	Ball, C. M. and Norton, S	do	May 28, 1889
394,951	Balsley, U. H	Telephones, systems	Dec. 25, 1888
395,201	Barber, A. M. and Gabriel, C	Belt shifters	Dec. 25, 1888
338,333	Barnard, W. T	Telegraphy, reed	Aug. 21, 1888
395,111	Barnes, W. A	Telegraphy, fire, alarms and extinguishers	Dec. 25, 1888
395,112	Barnes, W. A	do	Dec. 25, 1888
388,242	Barney, W. C	Telephones, electric	Aug. 21, 1888
390,833	Barrett, A. and Zentner, J	Annunciators	Oct. 9, 1888
392,775	Barrett, J. A	Conductors, anti-inductive	Nov. 13, 1888
397,331	Barrett, J. A	Anti-induction devices	Feb. 5, 1889
403,451	Barrett, J. A	Batteries, galvanic	May 14, 1889
405,196	Barrett, J. A	do	June 11, 1889
393,203	Bartley, L. C	do	Nov. 20, 1888
401,244	Basel, J. C	Connectors	Apr. 9, 1889
394,049	Bassford, W. K. and Maynard, E. B	Time checks	Dec. 4, 1888
388,753	Batley, J	Motors	Aug. 28, 1888
388,244	Baudot, J. M. E	Telegraphy, printing	Aug. 21, 1888
394,952	Baxter, W., jr	Applications, tools and machines	Dec. 25, 1888
405,867	Beach, F. G	Telephones, systems	June 25, 1889
388,335	Beattie, J., jr	Batteries, secondary	Aug. 21, 1888
394,810	Beattie, J., jr	Batteries, galvanic	Dec. 18, 1888
396,723	Beers, C. B	Magnetic locks and bolts	Jan. 29, 1889
394,905	Belding, W. S	Magneto-electric	Dec. 18, 1888

No.	NAME.	CLASS.	DATE.
395,260	Belding, W. S	Magneto-electric	Dec. 25, 1888
404,067	Belding, W. S	Motors	May 28, 1889
404,068	Belding, W. S	Magneto-electric	May 28, 1889
404,069	Belding, W. S	Motors	May 28, 1889
386,796	Belfield, R	Systems of distribution	July 31, 1888
386,797	Belfield, R	do	July 31, 1888
386,956	Belfield, R	Lights, systems	July 31, 1888
392,400	Belfield, R	Applications, general	Nov. 6, 1888
10,986	Belfield, R (Reis. of 392,400.)	do	Feb. 19, 1889
404,154	Belfield, R	Lightning arresters	May 28, 1889
402,890	Bemis, S. A. and Pingst, L	Railway cars, trucks	May 7, 1889
388,245	Benardos, N	Heaters	Aug. 21, 1888
388,246	Benardos, N	do	Aug. 21, 1888
401,405	Benardos, N	Rheostats	Apr. 16, 1889
401,631	Beuedict, G. H. and Furlong, P. M	Electrotyping	Apr. 16, 1889
399,474	Benjamin, F. P	Railway signals	Mar. 12, 1889
390,642	Bennett, J. B	Telegraphy, keys	Oct. 9, 1888
385,787	Bentley, E. M	Locomotion	July 10, 1888
385,902	Bentley, E. M	do	July 10, 1888
385,903	Bentley, E. M	do	July 10, 1888
389,278	Bentley, E. M	do	Sept. 11, 1888
389,279	Bentley, E. M	do	Sept. 11, 1888
400,038	Bentley, E. M	do	Mar. 26, 1889
400,179	Bentley, E. M	do	Mar. 26, 1889
400,180	Bentley, E. M	do	Mar. 26, 1889
400,181	Bentley, E. M	do	Mar. 26, 1889
400,182	Bentley, E. M	do	Mar. 26, 1889
391,010	Bentz, H	Meters	Oct. 16, 1888
385,539	Bergman, E. F	Cut-outs, mechanical	July 3, 1888
389,280	Bergmann, S	Lights, sockets and keys	Sept. 11, 1888
392,843	Bergmann, S	Telephones, supports	Nov. 13, 1888
395,116	Bergmann, S	Rheostats	Dec. 25, 1888
397,218	Bergmann, S	Lights, incandescent, special features	Feb. 5, 1889
398,121	Bergmann, S	Rheostats	Feb. 19, 1889
400,732	Bergmann, S	Cut-outs, mechanical	Apr. 2, 1889
400,733	Bergmann, S	do	Apr. 2, 1889
390,058	Bernheim, E. I	Telephones, calls	Sept. 25, 1888
403,727	Berrang, J. C	Insulators	May 21, 1889
389,356	Bickley, C. G	Batteries, secondary, applications	Sept. 11, 1888
392,660	Bidwell, B	Magneto-electric	Nov. 13, 1888
401,632	Billberg, C. O. C	do	Apr. 16, 1889
392,490	Billings, C. E	do	Nov. 6, 1888
398,122	Birdsall, E. T	Friction generators	Feb. 19, 1889
389,870	Bishop, J. D	Meters	Sept. 25, 1888
405,002	Bishop, W. S	Magneto-electric	June 11, 1889
388,247	Blackwell, J. L	Locomotion	Aug. 21, 1888
389,189	Blackwell, J. L	do	Sept. 11, 1888
389,281	Blackwell, J. L	do	Sept. 11, 1888
389,282	Blackwell, J. L	do	Sept. 11, 1888
396,725	Blades, H. H	Regulators	Jan. 29, 1889
397,773	Blades, H. H	do	Feb. 12, 1889
399,822	Blades, H. H	Motors	Mar. 19, 1889
403,905	Blades, H. H	Magneto-electric	May 28, 1889
391,224	Blair, J. B	Magneto-electric, hand-machinues	Oct. 16, 1888
399,236	Blair, J. B	Locomotion	Mar. 12, 1889
399,732	Blake, E	do	Mar. 19, 1889
392,403	Blake, F	Telephones, systems	Nov. 6, 1888
395,476	Blake, F	Telephones, electric	Jan. 1, 1889
398,814	Blake, H. T	Locomotion	Mar. 5, 1889
385,694	Blazskaye, J	Fire brick	July 10, 1888
386,449	Bliss, E. N. and Middleton, J. F	Cameras	July 24, 1888
397,270	Boda, A. Z	Railway signals	Feb. 5, 1889
386,103	Bohmeyer, C	Clocks, electric	July 17, 1888
401,120	Bottomo, T. D	Lights, filaments and carbons	Apr. 9, 1889
404,463	Bottomo, T. D	do	June 4, 1889
405,824	Bottomo, T. D	Chlorination	June 25, 1889
395,207	Bowen, C. H	Insulators	Dec. 25, 1888
390,062	Bowles, R. C. M	Telephones, mechanical	Sept. 25, 1888
398,577	Bowman, A. H. and Widdifield, W. P	Car brakes	Feb. 26, 1889
390,439	Bradley, C. S	Magneto-electric	Oct. 2, 1888
394,818	Bradley, C. S	do	Dec. 18, 1888
394,819	Bradley, C. S	do	Dec. 18, 1888
399,372	Bradley, C. S	Locomotion	Mar. 12, 1889
404,465	Bradley, C. S	Motors	June 4, 1889
404,466	Bradley, C. S	do	June 4, 1889
387,044	Brady, T. H	Lamp shades	July 31, 1888
390,440	Brady, T. H	do	Oct. 2, 1888

No.	NAME.	CLASS.	DATE.
398,489	Brady, T. H.	Locomotion	Feb. 26, 1889
388,622	Brainerd, F. W.	Clocks, electric	Aug. 28, 1888
399,128	Brainerd, F. W.	do	Mar. 5, 1889
395,609	Brangs, P. H.	Cut-outs, mechanical	Jan. 1, 1888
405,525	Braun, C. A.	Circuit-closers	June 18, 1889
335,839	Brear, S. D.	Telephones, mechanical	July 10, 1888
394,638	Brevoort, H. L. and Roberts, I. L.	Batteries, galvanic	Dec. 18, 1888
390,748	Brewer, H. J.	do	Oct. 9, 1888
391,505	Brewer, H. J.	do	Oct. 23, 1888
393,358	Brewer, H. J.	do	Nov. 27, 1888
405,767	Brewer, W. J.	Locomotion	June 25, 1889
388,177	Bridewell, R. F.	Lighting devices	Aug. 21, 1888
398,222	Brill, J. A.	Locomotion	Feb. 19, 1889
403,244	Brillié, L.	Meters	May 14, 1889
396,325	Brin, A. and L. Q.	Paper-making, bleaching	Jan. 15, 1889
399,826	Brooks, A. A.	Conductors	Mar. 19, 1889
401,927	Brooks, D. Jr.	Conductors, underground	Apr. 23, 1889
401,409	Brown, A. H.	Water distribution, mains and pipes	Apr. 16, 1889
386,685	Brown, C. E. L.	Magneto-electric	July 24, 1888
386,380	Brown, C. W.	Telephones, electric	July 17, 1888
393,612	Brown, C. W.	Telephones, systems	Nov. 27, 1888
404,680	Brown, C. W.	Telephones, supports	June 4, 1889
404,822	Brown, F. H.	Induction-coils	June 11, 1889
387,615	Brown, H. P.	Lighting, systems	Aug. 7, 1888
390,001	Brown, L. W.	Towers	Sept. 25, 1888
398,025	Brown, W. C.	Conductors, insulators	Feb. 19, 1889
391,114	Brush, C. F.	Regulators	Oct. 16, 1888
395,377	Brush, C. F.	Batteries, secondary, applications	Jan. 1, 1889
395,378	Brush, C. F.	do	Jan. 1, 1889
395,379	Brush, C. F.	do	Jan. 1, 1889
396,681	Brush, C. F.	do	Jan. 22, 1889
401,682	Brust, C.	Medical and surgical, body-wear	Apr. 16, 1889
391,943	Bryant, W. C.	Cut-outs, mechanical	Oct. 30, 1888
387,853	Buckingham, C. L. and Lemp, H.	Regulators	Aug. 14, 1888
394,095	Buckingham, C. L.	Magneto-electric	Dec. 4, 1888
403,177	Buell, C. E.	Batteries, secondary, applications	May 14, 1889
386,767	Bulen, G. F.	Time checks	July 24, 1888
390,113	Bullough, J.	Applications, general	Sept. 25, 1888
400,050	Bunker, I. S.	Annunciators	Mar. 26, 1889
405,461	Burbank, H. L.	Telephones, systems	June 18, 1889
399,375	Burden, J. A.	Separators	Mar. 12, 1889
402,717	Bnrke, C. G.	Telegraphy, relays and sounders	May 7, 1889
405,984	Burke, C. G.	Telegraphy, automatic	June 25, 1889
405,985	Burke, C. G.	Telegraphy, circuits and systems	June 25, 1889
405,986	Burke, C. G.	Telegraphy, automatic	June 25, 1889
405,987	Burke, C. G.	Telegraphy, relays and sounders	June 25, 1889
405,988	Burke, C. G.	do	June 25, 1889
405,989	Burke, C. G.	do	June 25, 1889
397,965	Burnley, W.	Batteries, galvanic	Feb. 19, 1889
399,314	Burnley, W.	Telegraphy, circuits and systems	Mar. 12, 1889
402,293	Burnley, W.	do	Apr. 30, 1889
388,757	Burns, J.	Lights, filaments and carbons	Aug. 28, 1888
393,814	Burns, P. C.	Batteries, galvanic	Dec. 4, 1888
404,165	Burry, J.	Telegraphy, circuits and systems	May 28, 1889
397,109	Bnssmann, O. S.	Cut-outs, mechanical	Feb. 5, 1889
391,229	Bntler, H. W.	Batteries, secondary	Oct. 16, 1888
399,016	Butterworth, A. W.	Telephones, mechanical	Mar. 5, 1889
390,281	Butz, A. M.	Thermostats	Oct. 2, 1888
404,893	Byrne, J. E.	Applications, tools and machines	June 11, 1889
404,894	Byrne, J. E.	do	June 11, 1889
404,895	Byrne, J. E.	do	June 11, 1889
405,010	Byrne, J. E.	Valve-controllers	June 11, 1889
404,682	Cabell, S. G.	Aging liquors	June 4, 1889
396,983	Cade, B.	Telegraphy, railway-car	Jan. 29, 1889
397,049	Cade, B.	Railway signals	Jan. 29, 1889
394,332	Cadwallader, B.	Applications, general	Dec. 11, 1888
397,221	Callender, W. M.	Conductors, underground	Feb. 5, 1889
395,311	Cameron, H. F. De B.	Batteries, secondary	Jan. 1, 1889
404,168	Cameron, H. F. De B. and Harris, T.	do	May 28, 1889
392,103	Campbell, H. F.	Conductors, anti-inductive	Oct. 30, 1888
401,732	Candee, W. L.	Telephones, details	Apr. 23, 1889
399,738	Cannan, J. J.	Telegraphy, fire, alarms and extinguishers	Mar. 19, 1889
404,469	Cannel, W.	Locomotion	June 4, 1889
395,950	Capek, J. V.	Heaters	Jan. 8, 1889
396,645	Card, G. F.	Meters	Jan. 22, 1889
396,465	Carey, G. H. and MacArthur, W.	Relays and sounders	Jan. 22, 1889
397,966	Carey, W. A.	Galvanometers	Feb. 19, 1889

No.	NAME.	CLASS.	DATE.
387,049	Carr, R. L. and Borden, P	Batteries, galvanic	July 31, 1888
388,628	Carr, R. L. and Borden, P	do	Aug. 28, 1888
401,006	Carranza, M. and Finoco, J. M.	Clocks, electric	Apr. 9, 1889
402,398	Carter, J. T	Railways, automatic signals	Apr. 30, 1889
402,506	Carter, J. T	Railway signals	Apr. 30, 1889
399,377	Carty, J. J.	Anti-induction devices	Mar. 12, 1889
403,458	Carty, J. J.	Telephones, systems	May 14, 1889
394,832	Casey, J. F	do	Dec. 18, 1888
394,833	Casey, J. F	do	Dec. 18, 1888
403,515	Casey, T. A	Railway signals	May 21, 1889
388,181	Cassard, H.	Batteries, galvanic	Aug. 21, 1888
404,600	Caspersson, C. A	Applications, general	June 4, 1889
399,497	Cassidy, J. C.	Lights, incandescent, special features	Mar. 12, 1889
397,830	Caughy, R. C	Railways, traction	Feb. 12, 1889
396,920	Chamberlain, J. C	Cut-outs, thermal	Jan. 29, 1889
389,196	Chase, H. A	Electro-magnets	Sept. 11, 1888
389,197	Chase, H. A	Motors	Sept. 11, 1888
392,664	Chase, H. A	Locomotion	Nov. 13, 1888
400,300	Chase, H. A	do	Mar. 26, 1889
388,631	Chase, S. A	Telegraphy, fire	Aug. 28, 1888
402,507	Chase, S. A	do	Apr. 30, 1889
404,518	Chase, S. A	do	June 4, 1889
404,519	Chase, S. A	do	June 4, 1889
403,250	Chcever, J. D	Separators	May 14, 1889
387,051	Cheney, F. A	Lightning arresters	July 31, 1888
386,184	Chesbrough, R. A	Locomotion	July 17, 1888
405,246	Childs, W. A	Batteries, galvanic	June 18, 1889
394,153	Chisholm, D. J.	Drop lights and hangers	Dec. 11, 1888
390,067	Chisholm, I. W	Galvanometers	Sept. 25, 1888
402,064	Christy, W	Locomotion	Apr. 23, 1889
387,145	Clamer, F. J.	Incrustation	July 31, 1888
387,146	Clamer, F. J.	do	July 31, 1888
397,489	Clamer, F. J. and Hendrickson, J. G	Batteries, galvanic	Feb. 12, 1889
404,602	Clark, E. P	Regulators	June 4, 1889
386,238	Clarke, F. E	Telephones, mechanical	July 17, 1888
387,969	Clark, F. E	do	Aug. 14, 1888
394,555	Clark, W. C	Annunciators	Dec. 18, 1888
394,834	Cleeve, H. F. and Parker, J	Soda-water apparatus	Dec. 18, 1888
391,512	Cleveland, W. B	Cut-outs, mechanical	Oct. 23, 1888
392,665	Cleverly, H. A	Igniting devices	Nov. 13, 1888
392,666	Coad, T	Lights, sockets and keys	Nov. 13, 1888
395,769	Coad, T	Batteries, galvanic	Jan. 8, 1889
401,688	Coats, C. C	Separators	Apr. 16, 1889
396,543	Cobb, H. B	Connectors	Jan. 22, 1889
392,855	Coburn, E. B	Regulators	Nov. 13, 1888
395,421	Cockburn, A. C	Cut-outs, thermal	Jan. 1, 1889
396,269	Coerper, C	Motors	Jan. 15, 1889
402,066	Coerper, C	Magneto-electric	Apr. 23, 1889
395,878	Coffin, C. L	Heaters	Jan. 8, 1889
396,270	Coffin, C. L	do	Jan. 15, 1889
399,019	Coffin, C. L	do	Mar. 5, 1889
401,639	Coffin, C. L	do	Apr. 16, 1889
405,345	Coffin, C. L	do	June 18, 1889
397,340	Cohen, R. L	Magneto-electric	Feb. 5, 1889
397,111	Colby, E. J	Batteries, galvanic	Feb. 5, 1889
400,304	Colby, E. J	Annunciators	Mar. 26, 1889
403,825	Cole, C. B	Conductors, underground	May 21, 1889
403,517	Cole, F. W	Electro-magnets	May 21, 1889
386,965	Cole, W. R	Telephones, electric	July 31, 1888
395,315	Coleman, J. P	Railway signals	Jan. 1, 1889
402,562	Coleman, J. P	do	May 7, 1889
404,170	Coleman, J. P	do	May 28, 1889
402,563	Colgate, A. E	Conductors, underground	May 7, 1889
403,418	Colgate, A. E	do	May 14, 1889
403,253	Collé, C	Batteries, galvanic	May 14, 1889
394,958	Colling, S	Medical and surgical, body-wear	Dec. 25, 1888
393,741	Collins, W. C	do	Dec. 4, 1888
393,742	Collins, W. C	Magneto-electric	Dec. 4, 1888
391,356	Collins, W. H	Telephones, electric	Oct. 16, 1888
389,638	Conant, T. P	Batteries, secondary, applications	Sept. 18, 1888
394,642	Conant, T. P	do	Dec. 18, 1888
393,323	Condict, G. H	Locomotion	Nov. 20, 1888
399,599	Condict, G. H	do	Mar. 12, 1889
400,830	Condict, G. H. and Angerer, V	do	Apr. 2, 1889
400,746	Conkling, G	Separators	Apr. 2, 1889
400,747	Conkling, G	do	Apr. 2, 1889
401,414	Conkling, G	do	Apr. 16, 1889

No.	NAME.	CLASS.	DATE.
401,415	Conkling, G	Separators	Apr. 16, 1889
402,904	Conkling, G	do	May 7, 1889
403,575	Conkling, G	do	May 21, 1889
403,576	Conkling, G	do	May 21, 1889
391,733	Connelly, W. A	Thermostats	Oct. 30, 1888
397,537	Conner, E. G	Knitting and netting, stopping	Feb. 12, 1889
388,477	Conner, W. A	Conductors	Aug. 28, 1888
395,546	Conner, W. A	do	Jan. 1, 1889
402,565	Cook, G. W	Conductors, underground	May 7, 1889
385,846	Cook, J. A	Telephones, switch-boards	July 10, 1888
393,837	Couche, J	Winding bobbins, weft-wind	Dec. 4, 1888
400,750	Cox, C. A. and J. F	Annunciators	Apr. 2, 1889
401,417	Cox, C. W. and Van Dyke, T. E	Lights, incandescent, special features	Apr. 16, 1889
389,640	Cox, H. B	Induction-coils	Sept. 18, 1888
393,422	Craig, T. E	Magneto-electric	Nov. 27, 1888
397,418	Crandall, J. E	Telegraphy, lightning arresters	Feb. 5, 1889
388,836	Crane, M. G	Bells	Sept. 4, 1888
400,398	Cramer, W. C. and Arnold, S. W	Conductors, underground	Mar. 26, 1889
388,837	Crockett, C. H. and Allen, C. C	Annunciators	Sept. 4, 1888
387,343	Crompton, R. E. B	Magneto-electric	Aug. 7, 1888
397,171	Crosby, E. H	Telegraphy, fire, alarms and extinguishers	Feb. 5, 1889
400,430	Crosby, E. H	Batteries, galvanic	Apr. 2, 1889
397,969	Cross, E. D	do	Feb. 19, 1889
398,132	Cross, E. D	do	Feb. 19, 1889
402,408	Crouch, F. J	Telegraphy, railway-car	Apr. 30, 1889
404,959	Crowell, L. C	Printing, rotary	June 11, 1889
391,517	Cuff, J. E	Conductors	Oct. 23, 1888
393,744	Currie, S. C. C	Batteries, secondary, applications	Dec. 4, 1888
394,100	Currie, S. C. C	do	Dec. 4, 1888
398,769	Currie, S. C. C	Connectors	Feb. 26, 1889
400,395	Currie, S. C. C	Batteries, secondary, applications	Mar. 26, 1889
401,255	Currie, S. C. C	do	Apr. 9, 1889
401,332	Currie, S. C. C	do	Apr. 16, 1889
393,314	Currier, H. L	Valve controllers	Feb. 19, 1889
404,033	Currier, H. L	Telegraphy, circuit-closers	May 28, 1889
388,023	Curry, F. P.	Signals, automatic	Aug. 21, 1888
386,111	Cutler, H. H	Conductors, insulators	July 17, 1888
397,538	Cutler, H. H	Meters	Feb. 5, 1889
386,059	Cuttriss, C	Telegraphy, automatic	July 10, 1888
393,745	Daft, L	Magneto-electric	Dec. 4, 1888
385,915	Daft, L	Locomotion	July 10, 1888
388,538	Daft, L	do	Aug. 28, 1888
388,955	Daft, L	do	Sept. 4, 1888
394,062	Daft, L	do	Dec. 4, 1888
396,195	Daft, L	Magneto-electric	Jan. 15, 1889
396,196	Daft, L	Locomotion	Jan. 15, 1889
403,092	Daft, L	do	May 14, 1889
404,470	Daft, L	Galvanometers	June 4, 1889
404,687	Daft, L	Locomotion	June 4, 1889
398,498	Dahl, O	do	Feb. 26, 1889
405,248	Dahl, O	Cut-outs, mechanical	June 18, 1889
405,249	Dahl, O	Meters	June 18, 1889
391,587	Dallas, M	Conductors, underground	Oct. 23, 1888
393,622	Dallas, M	Locomotion	Nov. 27, 1888
396,649	Davidson, W	Railways, turn-tables	Jan. 22, 1889
395,215	Davies, D. H. and Tourtel, J. M	Lighting systems	Dec. 25, 1888
402,410	Davis, D. L	Meters	Apr. 30, 1889
386,772	Davis, E	Telegraphy, fire	July 24, 1888
391,839	Davis, E	Telephones, calls	Oct. 30, 1888
400,311	Davis, E. H. and Westervelt, R	Motors	Mar. 26, 1889
400,312	Davis, E. H. and Westervelt, R	Thermostats	Mar. 26, 1889
389,448	Day, S. A	Primers	Sept. 11, 1888
394,680	Dawes, A	Drop-lights and hangers	Dec. 18, 1888
396,146	Dean, G. H	Lamp shades	Jan. 15, 1889
398,123	De Baun, S	Medical and surgical, body-wear	Feb. 19, 1889
400,754	Debonteville, E. D. and Malandin, L. P. C	Air and gas engines, explosive	Apr. 2, 1889
389,795	De Ferranti, S. Z	Systems of distribution	Sept. 18, 1888
389,838	De Ferranti, S. Z	Induction-coils	Sept. 18, 1888
394,837	De Ferranti, S. Z	Connectors	Dec. 18, 1888
394,838	De Ferranti, S. Z	do	Dec. 18, 1888
402,311	De Ferranti, S. Z	Locomotion	Apr. 30, 1889
401,014	De Figanière, A	Insulating materials	Apr. 9, 1889
386,189	Delany, P. B	Indicators	July 17, 1888
388,481	Delany, P. B	Telephones, circuits and systems	Aug. 28, 1888
389,062	Delany, P. B	do	Sept. 4, 1888
390,115	Delany, P. B	Galvanometers	Sept. 25, 1888
395,427	Delany, P. B	Telegraphy, automatic	Jan. 1, 1889

No.	NAME.	CLASS.	DATE.
401,334	Delany, P. B.	Telegraphy, circuits and systems	Apr. 16, 1889
403,180	De Mier, J. R.	Railway signals	May 14, 1889
394,839	Denio, W. L.	Telegraphy, fire, alarms and extinguishers	Dec. 18, 1888
397,338	Denio, W. L.	Telegraphy, circuit-closers	Feb. 12, 1889
397,702	Denison, J. F.	Motors	Feb. 12, 1889
402,810	Denver, W. J.	Telephones, anti-induction devices	May 7, 1889
385,920	De Redon, C. F.	Railway signals	July 10, 1888
397,975	De Redon, C. F.	Vending apparatus	Feb. 19, 1889
402,006	Desmazures, C.	Batteries, secondary	Apr. 23, 1889
398,327	De Vars, H. A. B. H.	Medical and surgical, baths	Feb. 19, 1889
402,007	Deweese, T. J.	Conductors, underground	Apr. 23, 1889
394,960	Dewey, M. W.	Telegraphy, automatic	Dec. 25, 1888
394,961	Dewey, M. W.	Telegraphy, circuits and systems	Dec. 25, 1888
395,613	Dewey, M. W.	Telegraphy, reed	Jan. 1, 1889
395,614	Dewey, M. W.	Telegraphy, printing	Jan. 1, 1889
395,958	Dewey, M. W.	Telegraphy, fire	Jan. 8, 1889
395,959	Dewey, M. W.	do	Jan. 8, 1889
396,734	Dewey, M. W.	Telegraphy, multiplex	Jan. 29, 1889
401,482	Dewey, M. W.	Heaters	Apr. 16, 1889
402,414	Dewey, M. W.	Telegraphy, automatic	Apr. 30, 1889
402,415	Dewey, M. W.	do	Apr. 30, 1889
402,416	Dewey, M. W.	Heaters	Apr. 30, 1889
405,559	Dewey, M. W.	Telegraphy, automatic	June 18, 1889
405,831	Dewey, M. W.	Telegraphy, fire	June 25, 1889
388,344	Dey, C. E.	Annunciators	Aug. 21, 1888
396,329	D'Humy, P. R. De F.	Batteries, galvanic	Jan. 15, 1889
396,549	Dickerson, E. N., jr.	Systems of distribution	Jan. 22, 1889
388,645	Diehl, P.	Tempering and annealing, applications	Aug. 23, 1888
389,876	Diehl, P.	Motors	Sept. 23, 1888
405,399	Diehl, R. and P.	Meters	June 18, 1889
398,035	Dieuleveult, U.	Telegraphy, circuits and systems	Feb. 19, 1889
399,134	Dillon, L. W.	Cut-outs, mechanical	Mar. 5, 1889
399,135	Dillon, L. W.	do	Mar. 5, 1889
389,796	Doriot, C.	Motors	Sept. 18, 1888
404,471	Drake, E. S.	Telephones, details	June 4, 1889
397,977	Dressler, C. E.	Telegraphy, automatic	Feb. 19, 1889
400,315	Dobbie, R. S.	Regulators	Mar. 26, 1889
400,552	Donaldson, R. S.	Conductors	Apr. 2, 1889
389,839	Dubinski, B.	Telegraphy, fire	Sept. 18, 1888
402,420	Doubleday, H. M. and R.	Lights, incandescent, special features	Apr. 30, 1889
390,846	Downing, W. W.	Lamp shades	Oct. 9, 1888
389,692	Downs, H. T.	Igniting devices	Sept. 18, 1888
391,590	Doyle, J.	Motors	Oct. 23, 1888
395,317	Dubey, E. A.	Advertising, signs	Jan. 1, 1889
405,206	Dubinski, B.	Time alarms	June 11, 1889
387,585	Dudley, W. J.	Telegraphy, fire	Aug. 7, 1888
399,505	Dudley, W. J.	Telephones, calls	Mar. 12, 1889
399,320	Du Laney, G. L.	Magneto-electric	Mar. 12, 1889
394,161	Dulles, W., jr.	Locomotion	Dec. 11, 1888
394,471	Duncan, L.	Batteries, secondary	Dec. 11, 1888
394,472	Duncan, L.	do	Dec. 11, 1888
394,473	Duncan, L.	do	Dec. 11, 1888
394,474	Duncan, L.	do	Dec. 11, 1888
390,575	D'Unger, R.	Telephones, electric	Oct. 2, 1888
394,914	Durant, G. F. and Bailey, H. L.	Telephones, systems	Dec. 18, 1888
393,624	Durieux, C.	Applications, general	Nov. 27, 1888
393,625	Durieux, C.	do	Nov. 27, 1888
404,390	Dutton, A. L.	Submarine lamps	June 4, 1889
394,562	Dutton, C. N.	Oscillating meters	Dec. 18, 1888
396,355	Dyer, I. T.	Magneto-electric	Jan. 15, 1889
395,961	Dyer, R. N.	Locomotion	Jan. 8, 1889
399,137	Dyer, R. N.	do	Mar. 5, 1889
391,034	Eames, H. H.	Reducing and separating	Oct. 16, 1888
391,360	Eames, H. H.	Electrolysis	Oct. 16, 1888
403,256	Eames, H. H.	Separators	May 14, 1889
394,563	Easton, L. F.	Thermostats	Dec. 18, 1888
405,151	Easton, L. F.	do	June 11, 1889
389,207	Eastwick, A. E.	Motors	Sept. 11, 1888
385,344	Eaton, A. K.	Batteries, galvanic	July 3, 1888
389,140	Eaton, A. K.	do	Sept. 4, 1888
391,592	Eddy, A. H.	Galvanometers	Oct. 23, 1888
391,593	Eddy, A. H.	Motors	Oct. 23, 1888
391,594	Eddy, A. H.	Cut-outs, thermal	Oct. 23, 1888
399,507	Eddy, A. H.	Motors	Mar. 12, 1889
386,974	Edison, T. A.	Phonographs	July 31, 1888
389,369	Edison, T. A.	Lights, incandescent	Sept. 11, 1888
390,462	Edison, T. A.	Lights, filaments and carbons	Oct. 2, 1888

No.	NAME.	CLASS.	DATE.
391,595	Edison, T. A	Systems of distribution	Oct. 23, 1888
391,596	Edison, T. A	Lights, incandescent	Oct. 23, 1888
395,123	Edison, T. A	Magneto-electric	Dec. 25, 1888
395,962	Edison, T. A	Lights, incandescent	Jan. 8, 1889
395,963	Edison, T. A	Lights, filaments and carbons	Jan. 8, 1889
396,356	Edison, T. A	Separators	Jan. 15, 1889
397,705	Edison, T. A	Magneto-electric	Feb. 12, 1889
398,774	Edison, T. A	Lights, incandescent	Feb. 26, 1889
400,317	Edison, T. A	Separators	Mar. 26, 1889
401,486	Edison, T. A	Lighting systems	Apr. 16, 1889
401,646	Edison, T. A	Lights, incandescent	Apr. 16, 1889
401,902	Edison, T. A	Conductors	June 11, 1889
390,463	Edmunds, H	Batteries, secondary, applications	Oct. 2, 1888
390,464	Edmunds, H	do	Oct. 2, 1888
393,146	Edmunds, H	do	Nov. 20, 1888
393,147	Edmunds, H	do	Nov. 20, 1888
400,198	Edwards, E. A	Lights, arc, gravity feed, gear-clutch	Mar. 26, 1889
397,116	Egan, C. E	Batteries, galvanic	Feb. 5, 1889
399,748	Egan, C. E	Lights, sockets and keys	Mar. 19, 1889
401,936	Egleston, T	Conductors	Apr. 23, 1889
396,149	Eickemeyer, R	Magneto-electric	Jan. 15, 1889
397,492	Eickemeyer, R	do	Feb. 12, 1889
388,482	Eisenhart, C. A	Induction-coils	Aug. 28, 1888
388,960	Ellinger, J. O	Metal-working, miscellaneous	Sept. 4, 1888
389,455	Elliott, R. M	Batteries, secondary	Sept. 11, 1888
395,773	Emerson, E	Electro-deposition	Jan. 8, 1889
392,018	Emerson, V. H	Galvanometers	Oct. 30, 1888
385,664	Emmner, J., jr	Telephones, electric	July 3, 1888
390,955	Emmner, J., jr	Magneto-electric	Oct. 9, 1888
386,580	Enos, J. A	Batteries, secondary	July 24, 1888
386,581	Enos, J. A	Locomotion	July 24, 1888
398,713	Enos, J. A	Indicators	Feb. 26, 1889
402,912	Entrikin, J. B	Rheostats	May 7, 1889
400,838	Entz, J. B	Magneto-electric	Apr. 2, 1889
390,354	Epplé, L	Medical and surgical, body-wear	Oct. 2, 1888
389,799	Estabrook, W. W	Applications, general	Sept. 18, 1888
385,701	Euphrat, F	Rails	July 10, 1888
386,919	Everitt, P	Applications, general	July 31, 1888
387,347	Eysaman, A. H	Amalgamators, electric	Aug. 7, 1888
394,164	Farmer, J. S	Telegraphy, circuit closers	Dec. 11, 1888
392,724	Farnham, I. H	Cut-outs, electro-magnetic	Nov. 13, 1888
394,964	Farnham, I. H	Telephones, switch-boards	Dec. 25, 1888
401,338	Farr, H. G	Alloys	Apr. 16, 1889
389,882	Faure, C. A	Batteries, secondary	Sept. 25, 1888
393,325	Favre, J. C. J. C	Spring scales	Nov. 20, 1888
397,790	Fear, F	Medical and surgical, body-wear	Feb. 12, 1889
397,176	Ferdinand, A. B	Telephones, calls	Feb. 5, 1889
387,286	Fewson, H	Sewage and night-soil	Aug. 7, 1888
389,883	Field, S. D	Telegraphy, automatic	Sept. 25, 1888
391,954	Field, S. D	Regulators	Oct. 30, 1888
392,914	Field, S. D	Telegraphy, multiplex	Nov. 13, 1888
393,224	Field, S. D	Locomotion	Nov. 20, 1888
395,556	Field, S. D	Telegraphy, multiplex	Jan. 1, 1889
403,258	Field, S. D	Telegraphy, reed	May 14, 1889
393,749	Fisher, F. E	Locomotion	Dec. 4, 1888
405,544	Fisher, F. E	do	June 18, 1889
387,714	Fiske, B. A	Motors	Aug. 14, 1888
389,142	Fiske, B. A	Telegraphy, printing	Sept. 4, 1888
396,199	Fiske, B. A	Ordinance, electrical appliances	Jan. 15, 1889
387,679	Fitch, D. H	Batteries, secondary	Aug. 14, 1888
405,468	Flad, H	Locomotion	June 18, 1889
393,823	Flotron, E. and De La Bastie, F. B. A. R	Conductors, underground	Dec. 4, 1888
387,595	Forbes, G	Meters	Aug. 7, 1888
404,351	Fox, J. R	Lights, arc, gravity feed, clutch	May 28, 1889
392,114	Fraley, G. B	Systems of distribution	Oct. 30, 1888
393,751	France, J. R	Celluloid	Dec. 4, 1888
393,752	France, J. R	do	Dec. 4, 1888
393,636	Freeman, W. P	Magneto-electric	Nov. 27, 1888
402,915	Friedländer, A	Batteries, galvanic	May 7, 1889
404,693	Frishmuth, W	do	June 4, 1889
404,699	Frishmuth, W	do	June 4, 1889
405,546	Frist, R. P	Conductors	June 18, 1889
386,775	Fritsche, W	Magneto-electric	July 24, 1888
390,768	Ganse, H. D	Type-writing	Oct. 9, 1888
397,906	Galvin, J. A	Lighting systems	Feb. 19, 1889
387,636	Garl, M	Telephones, mechanical	Aug. 14, 1888
403,262	Garland, E. F	Conductors, anti-inductive	May 14, 1889

No.	NAME.	CLASS.	DATE.
395,492	Gartner, A	Regulators	Jan. 1, 1889
404,533	Gartner, A	Motors	June 4, 1889
385,705	Gaston, J. E	Lights, arc, positive feed	July 10, 1888
404,733	Gartner, A	Regulators	June 4, 1889
398,144	Geary, J	Alarms, burglar	Feb. 19, 1889
401,152	Geary, J	Electro-magnets	Apr. 9, 1889
401,153	Geary, J	Igniting devices, automatic	Apr. 9, 1889
400,658	Gennert, E. F	Gas setting	Apr. 2, 1889
393,637	Gerry, J. H	Clocks, electric	Nov. 27, 1888
405,089	Gerry, J. H	do	June 11, 1889
393,639	Gethins, J. L	Batteries, galvanic	Nov. 27, 1888
388,668	Gibson, C. D. P	Batteries, secondary	Aug. 28, 1888
397,796	Gibson, C. D. P	do	Feb. 12, 1889
401,343	Gildemeyer, C. A	Wire fasteners	Apr. 16, 1889
399,192	Gill, O. A	Sack scales	Mar. 5, 1889
401,743	Gillett, W	Telephones, electric	Apr. 23, 1889
401,154	Gillette, G. H. and K. C	Conductors, underground	Apr. 9, 1889
401,155	Gillette, G. H. and K. C	do	Apr. 9, 1889
402,157	Gilman, C. C	Applications, general	Apr. 30, 1889
403,834	Gilman, W. H	Music, self-playing instruments	May 21, 1889
396,334	Gilson, S. H	Insulators	Jan. 15, 1889
400,325	Ginochio, N. B	Telephones, magnetic	Mar. 26, 1889
400,326	Ginochio, N. B	Telephones, calls	Mar. 26, 1889
400,327	Ginochio, N. B	Magneto-electric, hand-machines	Mar. 26, 1889
400,661	Gipperich, A	Galvanometers	Apr. 2, 1889
400,662	Gipperich, A	do	Apr. 2, 1889
400,663	Gipperich, A	do	Apr. 2, 1889
401,428	Gipperich, A	do	Apr. 16, 1889
403,345	Gish, J. L	Rheostats	May 14, 1889
395,130	Given, J. L	Railways, pneumatic	Dec. 25, 1888
401,156	Gläser, H	Friction generators	Apr. 9, 1889
405,471	Gleeson, T	Magneto-electric	June 18, 1889
396,557	Gmür, B. and Flatz, O	Magneto-electric, hand-machines	Jan. 22, 1889
393,824	Goodridge, W. M	Telephones, switch boards	Dec. 4, 1888
392,326	Gould, C. C	Telephones, systems	Nov. 6, 1888
403,100	Grady, T. H	Time alarms	May 14, 1889
386,463	Grah, E	Valve controllers	July 24, 1888
391,364	Granger, E. D	Medical and surgical, body-wear	Oct. 16, 1888
396,867	Grant, P	Regulators	Jan. 29, 1889
403,836	Gravier, A. I	do	May 21, 1889
386,814	Gray, E	Telegraphy, automatic	July 31, 1888
386,815	Gray, E	do	July 31, 1888
394,172	Gray, E	Magneto-electric, hand-machines	Dec. 11, 1888
399,876	Graydon, J. W	Shell fuses	Mar. 19, 1889
399,879	Graydon, J. W	do	Mar. 19, 1889
399,881	Graydon, J. W	Shells	Mar. 19, 1889
397,423	Greaves, J	Applications, general	Feb. 5, 1889
386,314	Green, G. F	Propulsion	July 17, 1888
388,859	Green, G. F	Locomotion	Sept. 4, 1888
390,293	Green, G. F	Railways, deadening noise	Oct. 2, 1888
400,764	Greene, P. R	Conductors, underground	Apr. 2, 1889
386,066	Gridley, F. J	Magnetic locks and bolts	July 10, 1888
394,173	Griffith, A. and Burbank, H. A	Telephones, switches	Dec. 11, 1888
397,284	Griffith, A. and Burbank, H. A	Telephones, calls	Feb. 5, 1889
393,431	Griggs, A. C	Railway signals	Nov. 27, 1888
399,326	Griggs, A. C	Connectors	Mar. 12, 1889
401,882	Grimley, C. H	Medical and surgical, body-wear	Apr. 23, 1889
389,297	Griscom, W. W	Lighting, systems	Sept. 11, 1888
391,468	Griscom, W. W	Batteries, secondary, applications	Oct. 23, 1888
393,365	Griscom, W. W	Cut-outs, mechanical	Nov. 27, 1888
393,469	Griscom, W. W	Magneto-electric	Nov. 27, 1888
393,470	Griscom, W. W	Batteries, secondary, applications	Nov. 27, 1888
393,755	Griscom, W. W	Metal working, miscellaneous	Dec. 4, 1888
393,756	Griscom, W. W	Systems of distribution	Dec. 4, 1888
393,757	Griscom, W. W	Batteries, secondary, applications	Dec. 4, 1888
394,485	Griscom, W. W	Cut-outs, electro-magnetic	Dec. 11, 1888
394,568	Griscom, W. W	Cut-outs, mechanical	Dec. 18, 1888
400,842	Griscom, W. W	Batteries, secondary	Apr. 2, 1889
400,843	Griscom, W. W	do	Apr. 2, 1889
401,270	Griscom, W. W	Cut-outs, mechanical	Apr. 9, 1889
401,744	Griscom, W. W	Batteries, secondary	Apr. 23, 1889
402,586	Griscom, W. W	do	May 7, 1889
404,968	Griscom, W. W	Batteries, secondary, applications	June 11, 1889
405,733	Griscom, W. W	Metal working, miscellaneous	June 25, 1889
405,996	Griscom, W. W	do	June 25, 1889
397,424	Griscom, W. W. and Weidner, H. N	Connectors	Feb. 5, 1889
388,862	Grissold, H. P	Steering and propulsion	Sept. 4, 1888

No.	NAME.	CLASS.	DATE.
388,357	Guest, J. H	Telegraphy, fire, alarms and extinguishers	Aug. 21, 1888
388,358	Guest, J. H	Telegraphy, fire	Aug. 21, 1888
387,160	Guntz, G	Motors	July 31, 1888
397,461	Gutmann, L	Induction-coils	Feb. 5, 1889
397,910	Gutmann, L	do	Feb. 19, 1889
404,906	Hadlock, W. E	Clocks	June 11, 1889
401,348	Haight, H. J	Thermometers	Apr. 16, 1889
396,155	Hale, F. W	Piano attachments	Jan. 15, 1889
396,156	Hale, F. W	Exercising devices	Jan. 15, 1889
392,604	Hale, G. C., Barrett, A. and Zentner, J	Telegraphy, fire	Nov. 13, 1888
398,828	Hall, A. E.	Applications, general	Dec. 4, 1888
386,980	Hall, A. W	Telephones, mechanical	July 31, 1888
400,664	Hall, C. M	Reducing and separating, aluminium	Apr. 2, 1889
400,665	Hall, C. M	do	Apr. 2, 1889
400,666	Hall, C. M	do	Apr. 2, 1889
400,667	Hall, C. M	do	Apr. 2, 1889
400,766	Hall, C. M	do	Apr. 2, 1889
391,605	Hall, E. J	Conductors	Oct. 23, 1888
400,911	Hall, P. E	Telephones, supports	Apr. 9, 1889
402,823	Hammer, E. G	Clocks	May 7, 1889
397,715	Hammer, W. J	Cut-outs, mechanical	Feb. 12, 1889
400,669	Hammer, W. J	Cut-outs, thermal	Apr. 2, 1889
385,458	Harding, A	Magneto-electric	July 3, 1888
393,558	Harms, C. F	Telegraphy, circuit-closers	Nov. 27, 1888
388,487	Harris, A. E	Conductors	Aug. 28, 1888
391,319	Harris, L. S	Regulators	Oct. 16, 1888
390,778	Harris, P. A	Telegraphy, circuit-closers	Oct. 9, 1888
394,648	Harris, T. W	Railways, traction, underground	Dec. 18, 1888
387,718	Hartwell, N. W	Telephones, supports	Aug. 14, 1888
399,400	Harvey, W. B.	Cut-outs, electro-magnetic	Mar. 12, 1889
405,211	Haskins, C. D.	Telegraphy, quadruplex	June 11, 1889
393,304	Haskins, C. H	Igniting devices	Nov. 20, 1888
400,209	Haskins, D. G	Hydraulic motors, rotary	Mar. 26, 1889
403,104	Hatch, A. A	Telephones, calls	May 14, 1889
394,978	Hauss, D. J	Magneto-electric	Dec. 25, 1888
398,618	Hayden, H., jr. and Desant, W. F. Z	Railway signals	Feb. 26, 1889
395,137	Hayes, H. V	Telephones, systems	Dec. 25, 1888
395,974	Hayes, H. V. and White, A. C	Galvanometers	Jan. 8, 1889
399,328	Hayes, J. A	Magneto-electric	Mar. 12, 1889
385,927	Hazell, J. W	Applications, general	July 10, 1888
385,928	Heald, E. W	Locomotion	July 10, 1888
398,614	Healy, C. L	Telegraphy, dynamo	Feb. 26, 1889
402,592	Heaviside, A. W	Insulators	May 7, 1889
393,704	Heimann, S	Lamp chimneys	Nov. 27, 1888
403,267	Heimann, S	Conductors	May 14, 1889
396,870	Heinrichs, C. F	Batteries, galvanic	Jan. 29, 1889
396,871	Heinrichs, C. F	do	Jan. 29, 1889
392,518	Heisler, C	Systems of distribution	Nov. 6, 1888
394,180	Heisler, C	Cut-outs, mechanical	Dec. 11, 1888
390,229	Hempel, A	Separators	Oct. 2, 1888
402,080	Henderson, J. W	Locomotion	Apr. 23, 1889
396,207	Henion, W	Railway signals	Jan. 15, 1889
393,644	Hermann, S	Insulating materials	Nov. 27, 1888
398,045	Hermite, E., Paterson, E. J. and Cooper, C. F	Paper-making, bleaching	Feb. 19, 1889
387,876	Hérault, P.	Reducing and separating, aluminium	Aug. 14, 1888
392,953	Herrington, G. H	Phonographs	Nov. 13, 1888
390,597	Hewett, E. M	Batteries, galvanic	Oct. 2, 1888
387,642	Hewett, E. M	do	Aug. 14, 1888
387,643	Hewett, E. M	do	Aug. 14, 1888
388,415	Hewins, E. H	Shaft couplings	Aug. 28, 1888
387,974	Hexamer, C. J	Clocks, electric	Aug. 14, 1888
385,413	Heysinger, I. W	Locomotion	July 3, 1888
389,888	Heysinger, I. W	Lights, sockets and keys	Sept. 25, 1888
391,792	Heysinger, I. W	Locomotion	Oct. 30, 1888
391,793	Heysinger, I. W	do	Oct. 30, 1888
398,963	Heysinger, I. W	do	Mar. 5, 1889
392,863	Heywood, B	do	Nov. 13, 1888
399,329	Heywood, B	Magneto-electric	Mar. 12, 1889
389,812	Hicks, T. H	do	Sept. 18, 1888
399,534	Hicks, T. H	Systems of distribution	Mar. 12, 1889
402,671	Hicks, T. H	do	May 7, 1889
405,213	Hicks, T. H	Batteries, secondary	June 11, 1889
398,833	Higgins, F. H. W	Telegraphy, printing	Mar. 5, 1889
399,401	Higham, D	Regulators	Mar. 12, 1889
399,402	Higham, D	do	Mar. 12, 1889
399,403	Higham, D	Magneto-electric	Mar. 12, 1889
399,404	Higham, D	do	Mar. 12, 1889

No.	NAME.	CLASS.	DATE.
400,680	Higham, D.	Regulators	Apr. 2, 1889
403,937	Hilkier, C. F.	Thermostats	May 28, 1889
388,869	Hill, H. T.	Telegraphy, railway-car	Sept. 4, 1888
390,301	Hill, W. S.	Magneto-electric	Oct. 2, 1888
398,510	Hill, W. S.	Cut-outs, mechanical	Feb. 26, 1889
391,969	Himmer, V.	Clocks, electric	Oct. 30, 1888
399,666	Hitchcock, C. A.	Telephones, electric	Mar. 19, 1889
403,752	Hobbs, J. C.	Reducing and separating	May 21, 1889
404,484	Hochhausen, W.	Magneto-electric	June 4, 1889
390,230	Hoefling, C. E.	Clocks, electric	Oct. 2, 1888
396,086	Hoffmann, C.	Magneto-electric	Jan. 15, 1889
397,548	Hoffmann, C. G.	Telethermometers	Feb. 12, 1889
389,151	Hogan, G. L.	Igniting devices	Sept. 4, 1888
385,556	Hoke, C. U.	Medical and surgical, body-wear	July 3, 1888
397,364	Holcombe, A. G.	Annunciators	Feb. 5, 1889
402,928	Holcomb, F. A.	Records	May 7, 1889
402,929	Holcomb, F. A.	Telegraphy, transmitters	May 7, 1889
395,781	Hollerith, H.	Indicators	Jan. 8, 1889
395,782	Hollerith, H.	do.	Jan. 8, 1889
395,783	Hollerith, H.	do.	Jan. 8, 1889
397,594	Holley, W. A. and Malin, W.	Grain meters	Feb. 12, 1889
396,982	Holt, A. J.	Regulators	Jan. 29, 1889
399,228	Hopkins, G. I.	Telegraphy, railway-car	Mar. 5, 1889
402,828	Hopkins, G. I.	Telegraphy, circuit-closers	May 7, 1889
402,829	Hopkins, G. I.	Connectors	May 7, 1889
400,214	Horne, W. L.	Lights, systems and appliances	Mar. 26, 1889
386,129	Hotchkiss, Z. P.	Telegraphy, transmitters	July 17, 1888
403,472	Hotchkiss, Z. P.	Telegraphy, printing	May 14, 1889
403,671	Houghton, D.	Lights, arc, positive feed, gear-clutch	May 21, 1889
386,322	Howe, T. B.	Car heaters	July 17, 1888
394,925	Hoyt, A. J.	Telegraphy, circuit-closers	Dec. 18, 1888
399,535	Huber, J. L.	Batteries, secondary	Mar. 12, 1889
405,480	Hughes, T. V. and Chambers, C. R.	Lights, filaments and carbons	June 18, 1889
396,933	Hulford, W. J.	Refrigerators	Jan. 29, 1889
399,331	Hull, W. S. and Anderson, J. C.	Railway signals	Mar. 12, 1889
386,071	Humans, W.	Magneto-electric, hand-machines	July 10, 1888
388,876	Humans, W.	Annunciators	Sept. 4, 1888
388,877	Humans, W.	Magneto-electric, hand-machines	Sept. 4, 1888
389,080	Humans, W.	Bells	Sept. 4, 1888
390,674	Humphreys, D.	Batteries, galvanic	Oct. 9, 1888
390,675	Humphreys, D.	do.	Oct. 9, 1888
390,676	Humphreys, D.	do.	Oct. 9, 1888
390,677	Humphreys, D.	do.	Oct. 9, 1888
385,672	Hunter, R. M.	Locomotion	July 3, 1888
392,675	Hunter, R. M.	do.	Nov. 13, 1888
397,235	Hunter, R. M.	Batteries, secondary	Feb. 5, 1889
397,550	Hunter, R. M.	Magneto-electric	Feb. 12, 1889
397,857	Hunter, R. M.	Heaters	Feb. 12, 1889
398,402	Hunter, R. M.	Locomotion	Feb. 26, 1889
399,409	Hunter, R. M.	do.	Mar. 12, 1889
400,404	Hunter, R. M.	Batteries, secondary	Mar. 26, 1889
400,916	Hunter, R. M.	Locomotion	Apr. 9, 1889
402,084	Hunter, R. M.	do.	Apr. 23, 1889
402,832	Hunter, R. M.	do.	May 7, 1889
403,192	Hunter, R. M.	do.	May 14, 1889
403,193	Hunter, R. M.	do.	May 14, 1889
403,754	Hunter, R. M.	do.	May 21, 1889
405,556	Hunter, R. M.	do.	June 18, 1889
405,668	Hunter, R. M.	Motors	June 18, 1889
391,797	Hyer, W. E.	do.	Oct. 30, 1888
400,215	Imschenetzky, A.	Batteries, galvanic	Mar. 26, 1889
390,081	Inghram, A. G.	Railways, signals	Sept. 25, 1888
393,237	Irving, J. I.	Station indicators	Nov. 20, 1888
389,226	Irwin, J.	Railways, signals	Sept. 11, 1888
386,541	Ives, E. B.	Telegraphy, railway car	July 24, 1888
400,917	Iwanowski, A. C.	Thermostats	Apr. 9, 1889
396,403	Jacquemier, M. J. R.	Meters	Jan. 22, 1889
392,033	Jacques, W. W.	Telephones, systems	Oct. 30, 1888
386,403	James, J. W.	Safety cars	July 17, 1888
398,731	James, J. W.	Medical and surgical, baths	Feb. 26, 1889
403,593	Jamieson, A.	Batteries, secondary	May 21, 1889
394,697	Jamieson, P. F.	Telegraphy, relays and sounders	Dec. 18, 1888
402,329	Jansen, A. M. J. and V. J. A. M.	Clocks, electric	Apr. 30, 1889
386,543	Jarman, A. J.	Locomotion	July 24, 1888
395,703	Jenkins, W. F.	do.	Jan. 8, 1889
395,442	Jennings, B.	do.	Jan. 1, 1889
402,836	Jennings, B.	do.	May 7, 1889

No.	NAME.	CLASS.	DATE.
386,073	Jewell, O. H	Purifying water	July 10, 1888
404,913	Johns, H. W., jr	Conductors	June 11, 1889
394,491	Johns, J. H	Alarms	Dec. 11, 1888
386,828	Johnson, C. W	Thermostats	July 31, 1888
393,473	Johnson, E. H	Cut-outs, thermal	Nov. 27, 1888
401,493	Johnson, E. H. and Greenfield, E. T	Conductors	Apr. 16, 1889
403,110	Johnson, G. B. and M	Heaters	May 14, 1889
392,034	Johnson, O. B	Cut-outs, mechanical	Oct. 30, 1888
390,481	Johnson, W. A	do	Oct. 2, 1888
397,806	Johnson, W. G	Medical and surgical, body-wear	Feb. 12, 1889
399,193	Johnson, W. S	Steam engines, triple-expansion	Mar. 5, 1889
397,553	Johnston, W. C., jr	Connectors	Feb. 12, 1889
386,636	Jones, L., jr	Knitting and netting, circular, circular machines.	July 24, 1888
386,986	Joslin, W. E	Insulators	July 31, 1888
398,896	Kahan, S. and Craven, A. W	Time alarms	Mar. 5, 1889
393,012	Kames, J	Locomotion	Nov. 20, 1888
393,013	Kames, J	do	Nov. 20, 1888
400,088	Kammeyer, C. E. K	Batteries, galvanic	Mar. 26, 1889
401,035	Kaselowsky, E	Telegraphy, circuit-closers	Apr. 9, 1889
397,295	Kearney, J. G	Dynamometers	Feb. 5, 1889
399,334	Keller, C. M	Drop lights and hangers	Mar. 12, 1889
393,373	Keller, F. J. and Carnes, J. W	Motors	Nov. 27, 1888
393,508	Kellogg, M. G	Telephones, systems	Nov. 27, 1888
385,863	Kellogg, M. G	do	July 10, 1888
386,886	Kellogg, M. G	do	July 31, 1888
386,887	Kellogg, M. G	do	July 31, 1888
387,645	Kellogg, M. G	do	Aug. 14, 1888
387,888	Kellogg, M. G	do	Aug. 14, 1888
387,889	Kellogg, M. G	do	Aug. 14, 1888
387,890	Kellogg, M. G	do	Aug. 14, 1888
388,052	Kellogg, M. G	do	Aug. 21, 1888
388,283	Kellogg, M. G	do	Aug. 21, 1888
393,509	Kellogg, M. G	do	Nov. 27, 1888
385,357	Kelly, J. E	Annunciators	July 3, 1888
404,630	Kelly, J. F	Induction-coils	June 4, 1889
395,622	Kelly, J. F	Magneto-electric	Jan. 1, 1889
399,269	Kelly, J. W	Telephones, switch-boards	Mar. 12, 1889
395,743	Kent, J. W. and Orr, R	Thermostats	Jan. 8, 1889
393,243	Ker, J. B. and Crawford, J	Telephones, systems	Nov. 20, 1888
397,006	Kester, J. F	Regulators	Jan. 29, 1889
397,007	Kester, J. F	Magneto-electric	Jan. 29, 1889
399,147	Kester, J. F	Regulators	Mar. 5, 1889
404,712	Kester, J. F	Magneto-electric	June 4, 1889
404,713	Kester, J. F	do	June 4, 1889
404,714	Kester, J. F	do	June 4, 1889
404,715	Kester, J. F	do	June 4, 1889
393,838	Kiel, W	Miscellaneous compositions	Dec. 4, 1888
388,053	Killin, V. C	Lights, arc, gravity feed, gear-clutch	Aug. 21, 1888
402,249	Kimball, J. L. and Wirt, H. C	Cut-outs, thermal	Apr. 30, 1889
385,558	King, F	Batteries, secondary	July 3, 1888
399,755	King, F	Batteries, secondary, applications	Mar. 19, 1889
397,650	Kingsland, W	Batteries, secondary	Feb. 12, 1889
402,165	Kinsey, I	Bells	Apr. 30, 1889
405,964	Kinsman, F. E	Car brakes	June 25, 1889
388,690	Kirwan, G. H	Indicators	Aug. 28, 1888
395,706	Kitsee, I	Batteries, galvanic	Jan. 8, 1889
400,224	Kitsee, I	do	Mar. 26, 1889
400,225	Kitsee, I	do	Mar. 26, 1889
400,226	Kitsee, I	Batteries, secondary	Mar. 26, 1889
400,227	Kitsee, I	Batteries, galvanic	Mar. 26, 1889
386,784	Knight, W. H	Locomotion	July 24, 1888
389,229	Knight, W. H	do	Sept. 11, 1888
389,230	Knight, W. H	do	Sept. 11, 1888
389,658	Knight, W. H	Magneto-electric	Sept. 18, 1888
396,880	Knowles, E. R	Cut-outs, mechanical	Jan. 29, 1889
396,940	Knowles, E. R	Cut-outs, electro-magnetic	Jan. 29, 1889
396,941	Knowles, E. R	Magneto-electric	Jan. 29, 1889
396,942	Knowles, E. R	do	Jan. 29, 1889
397,557	Knowles, E. R	Batteries, secondary	Feb. 12, 1889
397,729	Knowles, E. R	Cut-outs, mechanical	Feb. 12, 1889
399,052	Knowles, E. R	Batteries, secondary	Mar. 5, 1889
403,941	Knowles, E. R	Cut-outs, electro-magnetic	May 28, 1889
402,332	Knowlton, D. C	Igniting devices, manual	Apr. 30, 1889
405,420	Konigslow, H	Telephones, calls	June 18, 1889
405,566	Konigslow, O	Telephones, supports	June 18, 1889
385,760	Kookogey, W. P	Batteries, galvanic	July 10, 1888

No.	NAME.	CLASS.	DATE.
395,835	Kookogey, W. P.	Batteries, galvanic	Jan. 8, 1889
395,836	Kookogey, W. P.	Batteries, secondary, applications	Jan. 8, 1889
395,837	Kookogey, W. P.	Batteries, galvanic	Jan. 8, 1889
396,748	Kookogey, W. P.	Railway signals	Jan. 29, 1889
396,749	Kookogey, W. P.	do	Jan. 29, 1889
396,750	Kookogey, W. P.	do	Jan. 29, 1889
398,737	Kookogey, W. P.	Batteries, galvanic	Feb. 26, 1889
401,953	Kookogey, W. P.	Batteries, secondary	Apr. 23, 1889
402,166	Kookogey, W. P.	Batteries, galvanic	Apr. 30, 1889
392,736	Kotyra, M.	Incrustation	Nov. 13, 1888
393,159	Kronenberg, E.	Clocks, electric	Nov. 20, 1888
399,416	Kronenberg, E.	Igniting devices, manual	Mar. 12, 1889
393,477	Lake, W.	Stone and brick making	Nov. 27, 1888
403,352	Lake, W.	Conductors, underground	May 14, 1889
393,337	Lane, F. A.	Electro-magnetic	Nov. 20, 1888
399,054	Lane, G. M.	Lights, arc, gravity feed, gear-clutch	Mar. 5, 1889
400,692	Lane, G. M.	do	Apr. 2, 1889
398,409	Lang, E. M.	Batteries, secondary	Feb. 26, 1889
386,993	Lange, P.	Galvanometers	July 31, 1888
386,992	Lange, P.	do	July 31, 1888
392,437	Lange, P.	Meters	Nov. 6, 1888
392,438	Lange, P.	do	Nov. 6, 1888
392,439	Lange, P.	do	Nov. 6, 1888
394,541	Latshaw, Z.	Batteries, secondary, applications	Dec. 11, 1888
389,752	Lauckert, E. F. H. H.	Magneto-electric	Sept. 18, 1888
399,336	Lauckert, E. F. H. H.	Meters	Mar. 12, 1889
400,463	Law, M. D.	Lightning arresters	Apr. 2, 1889
395,151	Laurence, A.	Advertising, automatic devices	Dec. 25, 1888
400,464	Lawshie, S. R.	Lightning rods	Apr. 2, 1889
388,697	Lea, J.	Lights, arc, positive feed, gear-clutch	Aug. 28, 1888
399,057	Lecoultre, I. E.	Telegraphy, circuit-closers	Mar. 5, 1889
386,925	Lee, C. T.	Insulating materials	July 31, 1888
392,679	Lee, G. M.	Valve-controllers	Nov. 13, 1888
392,440	Lehman, J. H.	Igniting devices	Nov. 6, 1888
400,232	Lehman, J. H.	Telegraphy, circuit-closers	Mar. 26, 1889
403,944	Lehman, J. H.	Igniting devices, automatic	May 28, 1889
396,701	Lehy, G. B.	Alarms, burglar	Jan. 22, 1889
392,158	Lemp, H.	Lights, incandescent	Oct. 30, 1888
392,159	Lemp, H.	Lights, filaments and carbons	Oct. 30, 1888
403,541	Lemp, H.	Induction-coils	May 21, 1889
405,263	Lemp, H.	Regulators	June 18, 1889
401,444	Lemp, H. and Wightman, M. J.	Lights, incandescent	Apr. 16, 1889
405,895	Leonard, H. W.	Lighting, systems	June 25, 1889
405,896	Leonard, H. W.	do	June 25, 1889
405,897	Leonard, H. W. and Hauson, A.	Batteries, secondary, applications	June 25, 1889
401,041	Lewin, J. J.	Induction-coils	Apr. 9, 1889
391,477	Libbey, H. W.	Lights, arc, positive feed	Oct. 23, 1888
398,414	Lieb, C. A.	Railways, pneumatic	Feb. 26, 1889
398,836	Lieb, C. A.	do	Mar. 5, 1889
400,235	Liebert, E. and Rosenthal, S. A.	Telegraphy, circuit closers	Mar. 26, 1889
405,365	Lineff, A. L.	Locomotion	June 18, 1889
404,850	Littlehales, G. H.	Phonographs	June 11, 1889
394,380	Lloyd, E. L.	Conductors, insulators	Dec. 11, 1888
402,752	Locke, F. M. and Lapp, J.	do	May 7, 1889
10,980	Locke, S. D.	(Reis. of 355,185.) Paving, gutters	Jan. 29, 1889
393,165	Lockwood, T. D.	Telephones, anti-induction devices	Nov. 20, 1888
392,423	Long, M. W.	Railway signals	Nov. 6, 1888
392,444	Long, M. W.	do	Nov. 6, 1888
396,212	Long, J. V.	Medical and surgical, body-wear	Jan. 15, 1889
395,157	Loomis, F. F.	Magneto-electric	Dec. 25, 1888
396,579	Loomis, O. P.	Cut-outs, thermal	Jan. 22, 1889
396,580	Loomis, O. P.	Regulators	Jan. 22, 1889
396,581	Loomis, O. P.	Magneto-electric	Jan. 22, 1889
396,582	Loomis, O. P.	Systems of distribution	Jan. 22, 1889
396,583	Loomis, O. P.	Lights, sockets and keys	Jan. 22, 1889
402,753	Loomis, O. P.	Cut-outs, thermal	May 7, 1889
402,754	Loomis, O. P.	do	May 7, 1889
405,218	Loomis, O. P.	Regulators	June 11, 1889
405,572	Loomis, O. P.	Lighting, systems	June 18, 1889
392,127	Love, J. C.	Locomotion	Oct. 30, 1888
400,862	Lowrie, W. and Hall, C. J.	Induction-coils	Apr. 2, 1889
385,675	Lugo, O.	Motors	July 3, 1888
394,075	Lugo, O.	do	Dec. 4, 1888
396,213	Lugo, O.	Batteries, secondary, applications	Jan. 15, 1889
396,214	Lugo, O.	do	Jan. 15, 1889
399,059	Lugo, O.	Motors	Mar. 5, 1889
400,926	Lundell, R.	Locomotion	Apr. 9, 1889

No.	NAME.	CLASS.	DATE.
393,710	Lüngen, A	Bells	Nov. 27, 1888
393,711	Lüngen, A	Magnetic locks and bolts	Nov. 27, 1888
396,407	Lynch, J	Conductors, underground	Jan. 22, 1889
405,576	Lynch, J	do	June 18, 1889
398,519	Lynde, F. C.	Spring scales	Feb. 26, 1889
398,520	Lynde, F. C.	do	Feb. 26, 1889
393,521	Lynde, F. C.	do	Feb. 26, 1889
394,192	Macbeth, J	Blasting and fuses	Dec. 11, 1888
397,300	Mack, W. B.	Conductors, underground	Feb. 5, 1889
391,542	Madden, A. F.	Metal-working, miscellaneous	Oct. 23, 1888
401,289	Main, W.	Batteries, secondary	Apr. 9, 1889
401,290	Main, W.	do	Apr. 9, 1889
401,291	Main, W.	do	Apr. 9, 1889
402,683	Manning, C. E.	Advertising, signs	May 7, 1889
401,191	Manwaren, A. H.	Meters	Apr. 9, 1889
393,072	Marquand, A. J.	Incrustation	Nov. 20, 1888
400,866	Marshall, W.	Condensers	Apr. 2, 1889
402,027	Marshall, W.	do	Apr. 23, 1889
385,363	Martel, A. F.	Railway signals	July 3, 1888
385,677	Martel, A. F.	do	July 3, 1888
397,194	Martin, M.	Telegraphy, fire	Feb. 5, 1889
395,575	Marvin, H. N.	Motors	Jan. 1, 1889
395,399	Mast, L. L.	Lightning rods	Jan. 1, 1889
387,310	Mather, R. H.	Motors	Aug. 7, 1888
390,245	Mather, R. H.	Lights, arc, gravity feed, clutch	Oct. 2, 1888
390,180	Mather, W. and Hopkinson, J. and E.	Magneto-electric	Sept. 25, 1888
402,684	Maxim, H. S.	Separators	May 7, 1889
405,170	Maxim, H. S.	Lights, filaments and carbons	June 11, 1889
405,239	Maxim, H. S.	do	June 11, 1889
394,195	Maxwell, G. S.	Telephones, systems	Dec. 11, 1888
385,815	Mayo, J. E.	Cut-outs, mechanical	July 10, 1888
398,420	McCarthy, L. A.	Alarms, burglar	Feb. 26, 1889
402,264	McCluer, C. E.	Telephones, systems	Apr. 30, 1889
397,466	McCoy, A. T.	Telegraphy, printing	Feb. 5, 1889
391,853	McDill, H. C.	Cut-outs, electro-magnetic	Oct. 30, 1888
389,935	McDonald, W. H.	Batteries, secondary, applications	Sept. 25, 1888
387,726	McDougall, W. M.	Cars, steam, street	Aug. 14, 1888
387,526	McElroy, J. F.	Cut-outs, mechanical	Aug. 7, 1888
392,213	McElroy, W. J.	Systems of distribution	Nov. 6, 1888
393,073	McElroy, W. J. and McTighe, T. J.	do	Nov. 20, 1888
404,361	McFeely, R. F.	Applications, tools and machines	May 28, 1889
399,341	McFeely, R. F. and Potter, H. V.	do	Mar. 12, 1889
388,294	McGowen, J. J.	Igniting devices	Aug. 21, 1888
385,519	McIndoe, G. F. and J. W.	Electrotyping	July 3, 1888
389,314	McIntire, C.	Connectors	Sept. 11, 1888
400,239	McKinney, J. Y.	Alarms, burglar	Mar. 26, 1889
405,221	McKivitt, W. E.	Telephones, systems	June 11, 1889
385,585	McLaughlin, J. F.	Telegraphy, printing	July 3, 1888
386,597	McLaughlin, J. F.	Annunciators	July 24, 1888
386,646	McLaughlin, J. F.	Telegraphy, printing	July 24, 1888
388,140	McLaughlin, J. F.	do	Aug. 21, 1888
388,141	McLaughlin, J. F.	do	Aug. 21, 1888
388,142	McLaughlin, J. F.	do	Aug. 21, 1888
388,143	McLaughlin, J. F.	do	Aug. 21, 1888
393,998	McLaughlin, J. F.	Bells	Dec. 4, 1888
393,170	McMurray, L.	Electro-deposition	Nov. 20, 1888
392,520	McTighe, J. J.	Lights, filaments and carbons	Nov. 6, 1888
405,427	Melaney, W. H.	Lamps, shades	June 18, 1889
395,816	Mellett, L.	Telephones, mechanical	Nov. 13, 1888
395,163	Meloon, I. L. and Whiting, P. S.	Railway signals	Dec. 25, 1888
397,992	Merkel, G. H.	Chemicals, metalloids	Feb. 19, 1889
386,149	Meserole, A. V.	Batteries, galvanic	July 17, 1888
386,150	Meserole, A. V.	do	July 17, 1888
388,430	Meserole, A. V.	do	Aug. 28, 1888
399,274	Meserole, A. V.	Batteries, secondary	Mar. 12, 1889
393,272	Mestern, M.	Batteries, thermal	Feb. 19, 1889
387,432	Meston, A. W.	Magneto-electric	Aug. 7, 1888
397,657	Meyer, E.	Alarms	Feb. 12, 1889
389,894	Meyers, W. G. and Coward, F. E.	Magneto-electric	Sept. 25, 1888
400,352	Milner, W. H.	Lights, arc, gravity feed, clutch	Mar. 26, 1889
391,547	Milliken, G. F.	Bells	Oct. 23, 1888
394,784	Milliken, G. F.	Telegraphy, fire	Dec. 18, 1888
385,770	Mingle, G. W. and M.	Cut-outs, thermal	July 10, 1888
386,340	Miot, G.	Magneto-electric	July 17, 1888
386,648	Miot, G.	Galvanometers	July 24, 1888
385,943	Mitchell, T. B.	Magneto-electric	July 10, 1888
402,960	Moffatt, R. R.	Bells	May 7, 1889

No.	NAME.	CLASS.	DATE.
394,203	Moldenke, R. G. G	Drills	Dec. 11, 1888
400,473	Moore, A. T., jr. and Fitch, H. A	Lights, incandescent, special features	Apr. 2, 1889
389,526	Moore, F	Lamp shades	Sept. 11, 1888
389,758	Morrell, A. W	Lighting, systems	Sept. 18, 1888
388,707	Morris, H. G	Meters	Aug. 28, 1888
400,591	Morton, W. J	Telephones, electric	Apr. 2, 1889
405,045	Mowrer, M. L	Separators	June 11, 1889
386,754	Muir, J. S	Electrodes	July 24, 1888
402,099	Munier, C. J. A	Telegraphy, printing	Apr. 23, 1889
398,069	Nagle, A. F	Alarms	Feb. 19, 1889
390,795	Neu, G. S	Magnetic locks and bolts	Oct. 9, 1888
400,245	Neu, G. S	Steam valves, throttle	Mar. 26, 1889
390,891	Newlands, A. M	Knitting and netting, stopping	Oct. 9, 1888
389,096	Newman, E. A	Thermostats	Sept. 4, 1888
389,097	Newman, E. A	Valve controllers	Sept. 4, 1888
389,098	Newman, E. A	Thermostats	Sept. 4, 1888
389,099	Newman, E. A	do	Sept. 4, 1888
389,100	Newman, E. A	do	Sept. 4, 1888
389,822	Nicholson, J. D., McElroy, W. J. and Mc-Tighe, T. J.	Locomotion	Sept. 18, 1888
403,439	Nickerson, W. E	Applications, tools and machines	May 14, 1889
403,440	Nickerson, W. E	do	May 14, 1889
403,441	Nickerson, W. E	do	May 14, 1889
403,442	Nickerson, W. E	do	May 14, 1889
403,691	Nickerson, W. E	do	May 21, 1889
404,015	Nickerson, W. E	do	May 28, 1889
404,221	Nickerson, W. E	do	May 28, 1889
11,002	Noble, C. B (Reis. of 374,129.)	Lights, arc, gravity feed, clutch	May 7, 1889
403,955	Noble, C. B	Batteries, galvanic	May 28, 1889
401,200	Norris, W. E	Thermostats	Apr. 9, 1889
401,296	Noyes, J. G	Bells	Apr. 9, 1889
388,438	Nutter, F. H	Alarms, burglar	Aug. 28, 1888
401,789	Nutter, F. H	do	Apr. 23, 1889
391,761	Nutting, S. E	Lights, arc, gravity feed, clutch	Oct. 23, 1888
393,849	Nutting, S. E	Magneto-electric	Dec. 4, 1888
398,744	Nutting, S. E	Regulators	Feb. 26, 1889
400,476	Nutting, S. E	Lights, arc, gravity feed, gear-clutch	Apr. 2, 1889
403,482	O'Beirne, W. H	Insulators	May 14, 1889
403,483	O'Connell, J. J	Telephones, systems	May 14, 1889
404,426	Oehmeu, G. T	Telegraphy, printing	June 4, 1889
388,300	O'Kelly, J	Steering and propulsion	Aug. 21, 1888
399,549	Olsen, T	Testing machines	Mar. 12, 1889
399,154	O'Neil, J	Telegraphy, automatic	Mar. 5, 1889
389,001	Ongley, C. E	Applications, tools and machines	Sept. 4, 1888
389,853	Ongley, C. E	do	Sept. 18, 1888
391,855	Ongley, C. E	Telegraphy, circuit-closers	Oct. 30, 1888
387,316	Oreutt, E. L	Railway signals	Aug. 7, 1888
387,365	Oreutt, E. L	do	Aug. 7, 1888
403,549	Orford, J. M	Locomotion	May 21, 1889
405,742	Orford, J. M	Lights, incandescent, special features	June 25, 1889
401,366	Osborn, C. V	Induction-coils	Apr. 16, 1889
390,033	Otis, C. R	Elevators	Sept. 25, 1888
387,634	Overlack, B	Batteries, galvanic	Aug. 14, 1888
404,651	Paca, W. S	Motors	June 4, 1889
390,310	Packard, J. W	Lights, filaments and carbons	Oct. 2, 1888
391,815	Packard, J. W	do	Oct. 30, 1888
391,816	Packard, J. W	do	Oct. 30, 1888
392,686	Packard, J. W	Air and gas pumps, mechanical	Nov. 13, 1888
396,951	Packard, J. W	Photometers	Jan. 29, 1889
401,580	Packard, J. W	Air and gas pumps, mechanical	Apr. 16, 1889
401,582	Packard, J. W	Valve controllers	Apr. 16, 1889
393,657	Packer, R. and Cochran, I. E., jr	Alarms, burglar	Nov. 27, 1888
393,572	Paget, L	Locomotion	Nov. 27, 1888
393,573	Paget, L	Batteries, secondary	Nov. 27, 1888
393,574	Paget, L	Lights, arc, gravity feed, clutch	Nov. 27, 1888
393,575	Paget, L	Batteries, secondary	Nov. 27, 1888
393,576	Paget, L	do	Nov. 27, 1888
393,577	Paget, L	do	Nov. 27, 1888
393,578	Paget, L	Salines	Nov. 27, 1888
397,607	Paget, L	Batteries, secondary	Feb. 12, 1889
397,608	Paget, L	do	Feb. 12, 1889
394,207	Paige, D. O	Conductors, underground	Dec. 11, 1888
393,389	Paine, W. J	Applications, tools and machines	Nov. 27, 1888
399,550	Paiste, H. T	Cut-outs, mechanical	Mar. 12, 1889
399,155	Palmer, H. J	Railway signals	Mar. 5, 1889
400,479	Parke, J. G	Igniting devices, manual	Apr. 2, 1889
385,956	Parks, N	Telephones, electric	July 10, 1888

No.	NAME.	CLASS.	DATE.
391,070	Parrish, M. W. and Cole, W. R	Magneto-electric	Oct. 16, 1888
386,602	Parsons, H. W. and Hoduit, J	Regulators	July 24, 1888
401,551	Parsons, H. W	Torpedoes	Apr. 23, 1889
390,802	Patten, F. J	Telegraphy, circuits and systems	Oct. 9, 1888
392,930	Patten, F. J	Motors	Nov. 13, 1888
392,967	Patten, F. J	Locomotion	Nov. 13, 1888
395,508	Patten, F. J	Telegraphy, multiplex	Jan. 1, 1889
395,509	Patten, F. J	do	Jan. 1, 1889
395,510	Patten, F. J	do	Jan. 1, 1889
397,439	Patten, F. J	Motors	Feb. 5, 1889
397,817	Patten, F. J	do	Feb. 12, 1889
398,794	Patten, F. J	do	Feb. 26, 1889
394,081	Patten, F. J. and Bingham, T. A	Annunciators	Dec. 4, 1888
398,441	Patterson, W. R	Conductors	Feb. 26, 1889
398,442	Patterson, W. R	do	Feb. 26, 1889
402,347	Patterson, W. R	Thermostats	Apr. 30, 1889
403,484	Patterson, W. R	do	May 14, 1889
396,865	Paul, W. C. and Kleinstaub, O. D	Railway signals	Jan. 15, 1889
395,755	Pawlowski, J	Lights, arc, special features	Jan. 8, 1889
405,970	Pearson, J. T	Lights, incandescent, special features	June 25, 1889
398,075	Pederson, J. T	Batteries, secondary	Feb. 19, 1889
399,343	Penney, W. L. and Little, T	Conductors, underground	Mar. 12, 1889
392,633	Perkins, C. G	Cut-outs, mechanical	Nov. 13, 1888
395,170	Perkins, E. A. and Stuart, D. C	Railways, pneumatic	Dec. 25, 1888
403,487	Perret, F. A	Magneto-electric	May 14, 1889
405,223	Perret, F. A	Motors	June 11, 1889
385,877	Peters, C. H	Railway signals	July 10, 1888
388,505	Petit, H. S. and Bresson, H. S	Thermostats	Aug. 28, 1888
389,974	Pfannkuche, G. and A	Magneto-electric	Sept. 25, 1888
391,270	Pfannkuche, G	do	Oct. 16, 1888
393,447	Pfannkuche, G	Lights, arc, gravity, feed, gear-clutch	Nov. 27, 1888
393,448	Pfannkuche, G	Regulators	Nov. 27, 1888
396,422	Pfannkuche, G	do	Jan. 22, 1889
404,859	Pfannkuche, G	do	June 11, 1889
404,860	Pfannkuche, G	Galvanometers	June 11, 1889
404,861	Pfannkuche, G	do	June 11, 1889
405,174	Pfannkuche, G	Regulators	June 11, 1889
387,988	Pfatischer, M	Batteries, secondary, applications	Aug. 14, 1888
402,349	Pfatischer, M	do	Apr. 30, 1889
401,059	Phalan, J. H	Batteries, galvanic	Apr. 9, 1889
397,385	Phelps, W. S	Railways, traction, underground	Feb. 5, 1889
388,442	Phipps, E. H	Conductors, underground	Aug. 28, 1888
395,584	Phipps, E. H	do	Jan. 1, 1889
405,677	Pickernell, F. A	Telephones, supports	June 18, 1889
405,906	Pieper, H., fils	Lights, arc, positive feed, gear-clutch	June 25, 1889
398,276	Pierce, A. M	Advertising, automatic devices	Feb. 19, 1889
393,029	Poltevent, A	Insulating materials	Nov. 20, 1888
403,776	Pope, E	Telephones, calls	May 21, 1889
387,782	Powers, J. A	Cut-outs, mechanical	Aug. 14, 1888
388,581	Pratt, H. P	Medical and surgical, body-wear	Aug. 28, 1888
391,720	Pratt, H. P	do	Oct. 23, 1888
403,211	Pratt, H. P	Watch cases	May 14, 1889
405,176	Pratt, H. P	Medical and surgical, body-wear	June 11, 1889
402,104	Pratt, R. J	Batteries, galvanic	Apr. 23, 1889
402,190	Prescott, G. B., jr	Batteries, secondary, applications	Apr. 30, 1889
402,191	Prescott, G. B., jr	do	Apr. 30, 1889
402,192	Prescott, G. B., jr	do	Apr. 30, 1889
403,957	Price, J. B	Batteries, secondary	May 28, 1889
404,559	Priest, E. D	Locomotion	June 4, 1889
399,556	Putnam, T. A. B	Railway signals	Mar. 12, 1889
388,583	Raab, K	Meters	Aug. 28, 1888
401,065	Rabe, H	Clocks, electric	Apr. 9, 1889
386,030	Rae, J. H	Amalgamators, electric	July 10, 1888
399,209	Rae, J. H	do	Mar. 5, 1889
402,613	Rainey, W. K	Bells	May 7, 1889
393,391	Ram, G. S	Lights, filaments and carbons	Nov. 27, 1888
394,296	Rand, E. R	Batteries, galvanic	Dec. 11, 1888
401,207	Randall, C. A	Motors, miscellaneous	Apr. 9, 1889
391,917	Randall, J. D	Telegraphy, circuit-closers	Oct. 30, 1888
394,881	Reckenzaun, A	Meters	Dec. 18, 1888
394,880	Reckenzaun, A. and Pentz, J. A	do	Dec. 18, 1888
401,515	Reed, F. H	Locomotion	Apr. 16, 1889
401,067	Reilly, J. C	Telephones, switch-boards	Apr. 9, 1889
390,903	Reinmann, A. L	Lights, incandescent	Oct. 9, 1888
404,112	Reinmann, A. L. and Lange, P	Lights, filaments and carbons	May 28, 1889
397,754	Rheiner, H. S	do	Feb. 12, 1889
394,999	Rice, E. W., jr	Magneto-electric	Dec. 25, 1888

No.	NAME.	CLASS.	DATE.
396,602	Rice, E. W., jr	Regulators	Jan. 22, 1889
397,613	Rice, E. W., jr	do	Feb. 12, 1889
400,486	Rice, E. W., jr	Systems of distribution	Apr. 2, 1889
396,603	Rice, E. W., jr. and Rohrer, A. L	do	Jan. 22, 1889
399,163	Ricketson, J. C	Indicators	Mar. 5, 1889
404,866	Ricketson, J. C	do	June 11, 1889
404,867	Ricketson, J. C	do	June 11, 1889
386,085	Ries, E. E	Locomotion	July 10, 1888
386,086	Ries, E. E	do	July 10, 1888
386,087	Ries, E. E	do	July 10, 1888
386,088	Ries, E. E	Heaters	July 10, 1888
390,619	Ries, E. E	do	Oct. 2, 1888
390,904	Ries, E. E	Motors	Oct. 9, 1888
390,905	Ries, E. E	do	Oct. 9, 1888
390,906	Ries, E. E	Magneto-electric	Oct. 9, 1888
392,757	Ries, E. E	Locomotion	Nov. 13, 1888
402,107	Ries, E. E	Heaters	Apr. 23, 1889
402,108	Ries, E. E	do	Apr. 23, 1889
402,971	Ries, E. E	Systems of distribution	May 7, 1889
403,374	Ries, E. E	Heaters	May 14, 1889
404,306	Ries, E. E	do	May 28, 1889
401,591	Riesenberg, H	Railway signals	Apr. 16, 1889
394,883	Riethmann, G. W	Magneto-electric	Dec. 18, 1888
389,011	Riker, A. L	do	Sept. 4, 1888
393,266	Riker, A. L	do	Nov. 20, 1888
392,970	Ritchie, F	Annunciators	Nov. 13, 1888
396,667	Robbins, A. C	Alarms, burglar	Jan. 22, 1889
404,226	Robbins, A. C	Telegraphy, fire	May 28, 1889
392,971	Robbins, I	Locomotion	Nov. 13, 1888
385,774	Roberts, DeW. C	do	July 10, 1888
386,090	Roberts, I. L	Batteries, galvanic	July 10, 1888
392,167	Roberts, I. L	Regulators	Oct. 30, 1888
394,613	Roberts, I. L	Batteries, galvanic	Dec. 18, 1888
394,615	Roberts, I. L	do	Dec. 18, 1888
394,616	Roberts, I. L	do	Dec. 18, 1888
394,617	Roberts, I. L	do	Dec. 18, 1888
396,367	Roberts, I. L	Batteries, secondary	Jan. 15, 1889
396,368	Roberts, I. L	do	Jan. 15, 1889
396,369	Roberts, I. L	do	Jan. 15, 1889
394,614	Roberts, I. L. and Brevoort, H. L	Batteries, galvanic	Dec. 18, 1888
399,213	Robertson, J. H	Magneto-electric	Mar. 5, 1889
403,291	Robertson, J. H	Telephones, systems	May 14, 1889
403,292	Robertson, J. H	Telegraphy, circuits and systems	May 14, 1889
405,743	Robertson, J. H	Regulators	June 25, 1889
400,951	Robinson, M	Annunciators	Apr. 9, 1889
400,600	Rockwell, F. C	Lights, incandescent, special features	Apr. 2, 1889
402,481	Rockwell, F. C	Lights, sockets and keys	Apr. 30, 1889
400,011	Rogers, T. B. and Bartlett, S. H	Game apparatus	Mar. 19, 1889
403,376	Rogers, N. and Wharry, J. A	Air and gas engines, explosive	May 14, 1889
403,379	Rogers, N. and Wharry, J. A	do	May 14, 1889
403,380	Rogers, N. and Wharry, J. A	do	May 14, 1889
393,395	Roosevelt, H. L	Batteries, galvanic	Nov. 27, 1888
393,123	Root, F. H	do	Nov. 20, 1888
400,795	Root, F. H	Electro-magnets	Apr. 2, 1889
389,601	Rosebrugh, A. M	Telephones, mechanical	Sept. 18, 1888
405,602	Rosenqvist, C. L	Magneto-electric	June 18, 1889
401,518	Ross, H. S	Registers	Apr. 16, 1889
393,078	Rossbach, W. F	Annunciators	Nov. 20, 1888
391,820	Rossney, W. C. and Hunt, C. L	Printing, delivering	Oct. 30, 1888
400,492	Rousseau, D	Igniting devices, manual	Apr. 2, 1889
405,604	Rovello, A	Electrolysis	June 18, 1889
404,438	Ruddick, J. J	Telegraphy, fire	June 4, 1889
404,986	Rudolfy, J	Inhalers and respirators	June 11, 1889
398,456	Rumely, W. N	Steam engines, speed governors, centrifugal	Feb. 26, 1889
392,228	Russell, C. W	Drop-lights and hangers	Nov. 6, 1888
401,304	Russell, C. W. and Drake, J. I	do	Apr. 9, 1889
389,764	Rutter, N. P	Medical and surgical, body-wear	Sept. 18, 1888
385,727	Salisbury, W. S	Locomotion	July 10, 1888
394,015	Salisbury, W. S	do	Dec. 4, 1888
401,970	Sandwell, W. D	do	Apr. 23, 1889
405,507	Sandwell, W. D	Magneto-electric	June 18, 1889
386,561	Sawyer, W. H	Conductors	July 24, 1888
391,276	Sax, J	Annunciators	Oct. 16, 1888
389,857	Scales, E. A	Fare registers	Sept. 18, 1888
392,230	Scales, W. S	Clocks, electric	Nov. 6, 1888
395,357	Scales, W. S	do	Jan. 1, 1889
388,723	Schardt, B. and Jones, G	Lights, arc, special features	Aug. 28, 1888

No.	NAME.	CLASS.	DATE.
399,786	Schardt, B. and Jones, G	Lights, arc, special features	Mar. 19, 1889
394,791	Schefbauer, R.	Lights, arc, positive feed, gear-clutch	Dec. 18, 1888
396,342	Scheithauer, B	Batteries, galvanic	Jan. 15, 1889
387,010	Schmid, A	Magneto-electric	July 31, 1888
404,114	Schmid, A	Induction-coils	May 28, 1889
405,124	Schmid, A	Applications, general	June 11, 1889
399,084	Schmalz, J. B. and Faulkner, J. B	Electrodes	Mar. 5, 1889
402,484	Schoop, P	Batteries, secondary	Apr. 30, 1889
393,125	Schulte, W	Applications, general	Nov. 20, 1888
395,851	Schwartz, L. H. A	Cordage, warping	Jan. 8, 1889
385,482	Scribner, C. E	Telephones, systems	July 3, 1888
385,528	Scribner, C. E	do	July 3, 1888
388,458	Scribner, C. E	do	Aug. 28, 1888
388,454	Scribner, C. E	do	Aug. 28, 1888
388,791	Scribner, C. E	do	Aug. 28, 1888
391,762	Scribner, C. E	do	Oct. 23, 1888
393,396	Scribner, C. E	Valve controllers	Nov. 27, 1888
388,312	Scarles, B.	Batteries, galvanic	Aug. 21, 1888
385,826	Sechrist, A	Cut-outs, mechanical	July 10, 1888
388,078	Sedgwick, F	Tempering and annealing metals	Aug. 21, 1888
400,366	Sedgwick, F	Tempering and annealing, applications	Mar. 26, 1889
401,721	Sedgwick, F	do	Apr. 16, 1889
400,958	Seely, J. A	Conductors, underground	Apr. 9, 1889
386,898	Sellon, J. S	Batteries, secondary	July 31, 1888
392,826	Sellon, J. S	do	Nov. 13, 1888
396,770	Sellon, J. S	do	Jan. 22, 1889
396,769	Sellon, J. S	do	Jan. 29, 1889
396,958	Sellon, J. S	do	Jan. 29, 1889
401,466	Sellon, J. S	do	Apr. 16, 1889
404,310	Sellon, R. P	Meters	May 28, 1889
392,370	Sellon, R. P. and Mordey, W. M	Regulators	Nov. 6, 1888
389,532	Serson, J	Batteries, galvanic	Sept. 11, 1888
405,609	Serson, J	do	June 18, 1889
397,472	Seymour, J. B	Stationery, paper clips	Feb. 5, 1889
402,986	Shafer, E. B	Telegraphy, fire	May 7, 1889
404,507	Shafer, E. B	Transmitters	June 4, 1889
387,018	Shallenberger, O. B. and Byllesby, H. M	Induction-coils	July 31, 1888
388,008	Shallenberger, O. B	Meters	Aug. 14, 1888
388,004	Shallenberger, O. B	do	Aug. 14, 1888
390,910	Shallenberger, O. B	Regulators	Oct. 9, 1888
390,911	Shallenberger, O. B	Systems of distribution	Oct. 9, 1888
390,912	Shallenberger, O. B	Magneto-electric	Oct. 9, 1888
390,990	Shallenberger, O. B	Systems of distribution	Oct. 9, 1888
394,728	Shallenberger, O. B	Galvanometers	Dec. 18, 1888
397,392	Shallenberger, O. B	Magneto-electric	Feb. 5, 1889
398,457	Shallenberger, O. B	Motors	Feb. 26, 1889
398,458	Shallenberger, O. B	do	Feb. 26, 1889
404,566	Shallenberger, O. B	Transmission of power	June 4, 1889
404,567	Shallenberger, O. B	do	June 4, 1889
390,710	Shanck, H. K	Air and gas engines, explosive	Oct. 9, 1888
385,963	Sharp, E. A	Railways, signals	July 10, 1888
385,964	Sharp, E. A	Railway signals	July 10, 1888
392,233	Shaver, G. F	Telephones, mechanical	Nov. 6, 1888
399,635	Shaver, G. F	do	Mar. 12, 1889
400,126	Shaw, F	Batteries, galvanic	Mar. 26, 1889
404,441	Shaw, H. F. and G. F	Locomotion	June 4, 1889
393,271	Shaw, N. H	Extinguishers, gas	Nov. 20, 1888
398,525	Shaw, N. H	Igniting devices	Nov. 27, 1888
405,126	Shaw, N. H	do	June 11, 1889
397,443	Shaw, W. A	Batteries, secondary	Feb. 5, 1889
396,241	Shawhan, J. F	Lighting systems	Jan. 15, 1889
396,836	Shawhan, J. F	Heaters	Jan. 29, 1889
401,761	Shawhan, J. F	Magneto-electric	Apr. 23, 1889
388,922	Sheehy, R. J	Telephones, systems	Sept. 4, 1888
394,302	Sheffield, G. V	Telegraphy, printing	Dec. 11, 1888
405,436	Shelton, W. J	Medical and surgical, body-wear	June 18, 1889
389,254	Shepardson, G. D	Locomotion	Sept. 11, 1888
385,379	Short, S. H	do	July 3, 1888
394,139	Short, S. H	do	Dec. 4, 1888
394,887	Short, S. H	do	Dec. 18, 1888
396,618	Short, S. H	do	Jan. 22, 1889
398,661	Short, S. H	do	Feb. 26, 1889
398,662	Short, S. H	do	Feb. 26, 1889
398,663	Short, S. H	do	Feb. 26, 1889
401,221	Short, S. H	do	Apr. 9, 1889
401,796	Short, S. H	do	Apr. 23, 1889
401,797	Short, S. H	do	Apr. 23, 1889

No.	NAME.	CLASS.	DATE.
404,873	Short, S. H.	Locomotion	June 11, 1889
385,576	Sibley, C. C.	Conductors	July 3, 1888
388,592	Siebel, J. E.	Incrustation	Aug. 28, 1888
396,897	Siegrist, A.	Drop lights and hangers	Jan. 29, 1889
395,083	Siemens, W.	Miscellaneous compositions	Dec. 25, 1888
399,291	Siemens, W.	Conductors, lead-covered	Mar. 12, 1889
399,292	Siemens, W.	Galvanometers	Mar. 12, 1889
389,943	Silliman, R. F.	Conductors, underground	Sept. 25, 1888
398,906	Silvey, W. L.	Lights, arc, gravity feed, gear	Mar. 5, 1889
398,907	Silvey, W. L.	Lights, arc, gravity feed, gear-clutch	Mar. 5, 1889
399,038	Silvey, W. L.	Magneto-electric	Mar. 5, 1889
400,130	Silvey, W. L.	do.	Mar. 26, 1889
402,990	Silvey, W. L.	Motors	May 7, 1889
403,964	Silvey, W. L.	Lights, arc, positive feed	May 28, 1889
396,176	Simpson, D. J.	Connectors	Jan. 15, 1889
388,731	Sims, J. W.	Brakes	Aug. 28, 1888
389,608	Skinner, H.	Air and gas-engines, explosive	Sept. 18, 1888
404,661	Slater, H. B.	Motors	June 4, 1889
386,936	Slattery, M. M. M.	Systems of distribution	July 31, 1888
391,923	Slattery, M. M. M.	Lighting, systems	Oct. 30, 1888
404,801	Slattery, M. M. M.	Meters	June 4, 1889
392,641	Slocum, E. L.	Telegraphy, fire	Nov. 13, 1888
393,402	Smith, A. C.	Show boxes and cards	Nov. 27, 1888
395,667	Smith, D. G.	Railway signals	Jan. 1, 1889
393,590	Smith, D. W.	Cut-outs, mechanical	Nov. 27, 1888
399,165	Smith, D. W.	Steam boilers, circulation	Mar. 5, 1889
393,526	Smith, E. L.	Electrolysis	Nov. 27, 1888
404,118	Smith, F. S.	Lights, filaments and carbons	May 28, 1889
405,654	Smith, H. J. and Zalinski, E. L.	Blasting fuses	June 18, 1889
399,091	Smith, H. W.	Locomotion	Mar. 5, 1889
399,092	Smith, H. W.	do.	Mar. 5, 1889
394,218	Smith, J. A.	Organs	Dec. 11, 1888
394,621	Smith, M. H.	Locomotion	Dec. 18, 1888
403,491	Smith, T. J.	Insulators	May 14, 1889
403,492	Smith, T. J.	Induction-coils	May 14, 1889
395,187	Smith, W. B.	Boats, buoys and safes	Dec. 25, 1888
401,225	Smith, W. F.	Meters	Apr. 9, 1889
401,226	Smith, W. F.	do.	Apr. 9, 1889
392,698	Smith, W. R. and Washburn, A. L.	Spring scales	Nov. 13, 1888
402,626	Smead, B.	Annunciators	May 7, 1889
404,232	Snead, U.	Girders and columns	May 28, 1889
394,413	Soley, W. H.	Thermostats	Dec. 11, 1888
394,220	Sparrow, F. M.	do.	Dec. 11, 1888
394,307	Sparrow, F. M.	do.	Dec. 11, 1888
403,786	Speed, F. M.	Locomotion	May 21, 1889
388,594	Spencer, L. W. and Jaquith, F. P.	Lights, arc, positive feed, gear-clutch	Aug. 28, 1888
396,439	Sperry, E. A.	Cut-outs, electro-magnetic	Jan. 22, 1889
397,945	Sperry, E. A.	Batteries, galvanic	Feb. 19, 1889
398,668	Sperry, E. A.	Regulators	Feb. 26, 1889
400,264	Sperry, E. A.	Telegraphy, fire	Mar. 26, 1889
405,187	Sperry, E. A.	Drills	June 11, 1889
405,188	Sperry, E. A.	Mining machines	June 11, 1889
405,440	Sperry, E. A.	Lights, arc, gravity feed, clutch	June 18, 1889
405,441	Sperry, E. A.	Magneto-electric	June 18, 1889
397,398	Spiegel, W. G.	Vending apparatus	Feb. 5, 1889
397,875	Sprague, F. J.	Locomotion	Feb. 12, 1889
397,474	Stanley, L. T.	Electrodes	Feb. 5, 1889
387,117	Stanley, W., jr.	Systems of distribution	July 31, 1888
392,470	Stanley, W., jr.	Motors	Nov. 6, 1888
392,471	Stanley, W., jr.	do.	Nov. 6, 1888
392,890	Stanley, W., jr.	Regulators	Nov. 13, 1888
404,120	Stanley, W., jr.	do.	May 28, 1889
402,200	Statter, J. G.	Magneto-electric	Apr. 30, 1889
401,664	Steenbergh, G. C.	Railway signals	Apr. 16, 1889
403,619	Steenbergh, G. C.	do.	May 21, 1889
394,221	Steffens, M. J.	Printing and vignetting	Dec. 11, 1888
398,805	Steinhilber, A.	Igniting devices, automatic	Feb. 26, 1889
402,779	Steinhoff, A.	Valve controllers	May 7, 1889
394,734	Stevens, W. L.	Gearing	Dec. 18, 1888
394,735	Stevens, W. L.	Locomotion	Dec. 18, 1888
403,897	Stewart, J.	Lights, sockets and keys	May 14, 1889
400,139	Stewart, R. E.	Magneto-electric	Mar. 26, 1889
399,218	Stillwell, L. B.	Systems of distribution	Mar. 5, 1889
399,219	Stillwell, L. B.	do.	Mar. 5, 1889
398,288	Stirling, C. C.	Cut-outs, mechanical	Feb. 19, 1889
385,484	Stitzel, F. and Weinedel, C.	Metal working, riveting	July 3, 1888
389,337	Stitzel, F. and Weinedel, C.	Telegraphy, relays and sounders	Sept. 11, 1888

No.	NAME.	CLASS.	DATE.
393,865	Stitzel, F. and Weinedel, C	Railway signals	Dec. 4, 1888
398,353	Stitzel, F. and Weinedel, C	Railways, pneumatic	Feb. 19, 1889
399,579	Stitzel, F. and Weinedel, C	Railway signals	Mar. 12, 1889
393,183	Stocker, W. F	Batteries, secondary, applications	Nov. 20, 1888
393,315	Stocker, W. F	Meters	Nov. 20, 1888
400,140	Stockly, G. W	Lamps	Mar. 26, 1889
400,141	Stone, R. C	Telegraphy, transmitters	Mar. 26, 1889
392,080	Stout, G. H	Batteries, secondary	Oct. 30, 1888
403,969	Streat, T	Locomotion	May 28, 1889
400,880	Street, S. T	Railway signals	Apr. 2, 1889
405,382	Stromberg, A	Telephones, switches	June 18, 1889
402,043	Stuart, J. M	Annunciators	Apr. 23, 1889
387,265	Stuckert, J. F	Alarms, fire	Aug. 7, 1888
403,972	Sturtevant, T. L	Steam boilers, feeders	May 28, 1889
390,993	Sutherland, J. B	Railways, signals	Oct. 9, 1888
395,299	Sweet, D. F	Motors	Dec. 25, 1888
389,421	Tag, W. and Smith, S. C	Igniting devices	Sept. 11, 1888
399,168	Tag, W. and Smith, S. C	Igniting devices, manual	Mar. 5, 1889
404,877	Tailleur, G. E	Conductors, underground	June 11, 1889
392,882	Talbot, C. N	Telegraphy, fire	Nov. 13, 1888
405,621	Taylor, C. W	Keys	June 18, 1889
404,745	Taylor, E. C	Dentistry, miscellaneous	June 4, 1889
401,472	Taylor, T	Railway signals	Apr. 16, 1889
390,413	Tesla, N	Systems of distribution	Oct. 2, 1888
390,414	Tesla, N	Magneto-electric	Oct. 2, 1888
390,415	Tesla, N	do	Oct. 2, 1888
390,721	Tesla, N	do	Oct. 9, 1888
390,820	Tesla, N	Regulators	Oct. 9, 1888
396,121	Tesla, N	Motors	Jan. 15, 1889
401,520	Tesla, N	do	Apr. 16, 1889
405,858	Tesla, N	do	June 25, 1889
405,859	Tesla, N	Transmission of power	June 25, 1889
392,701	Thaxter, G. E	Igniting devices	Nov. 13, 1888
400,969	Thayer, H. B	Telephones, systems	Apr. 9, 1889
393,192	Thayer, R	Applications, general	Nov. 20, 1888
395,524	Thayer, R	Applications, tools and machines	Jan. 1, 1889
388,229	Thode, C. W. F	Bolts	Aug. 21, 1888
402,491	Thomas, B. F	Medical and surgical, body-wear	Apr. 30, 1889
403,624	Thomas, W. R	Separators	May 21, 1889
392,573	Thompson, C. H	Batteries, secondary	Nov. 6, 1888
392,574	Thompson, C. H	do	Nov. 6, 1888
397,526	Thompson, C. M	Batteries, galvanic	Feb. 12, 1889
401,801	Thompson, D. W	Valve-controllers	Apr. 23, 1889
401,606	Thompson, E. P	Lights, filaments and carbons	Apr. 16, 1889
401,607	Thompson, E. P	do	Apr. 16, 1889
403,303	Thompson, E. P	Connectors	May 14, 1889
385,388	Thompson, W. C	Telegraphy, fire	July 3, 1888
387,932	Thompson, W. H	Lights, systems and appliances	Aug. 14, 1888
385,384	Thomson, E	Heaters	July 3, 1888
385,385	Thomson, E	do	July 3, 1888
385,386	Thomson, E	do	July 3, 1888
385,647	Thomson, E	Meters	July 3, 1888
386,441	Thomson, E	Heaters	July 17, 1888
387,123	Thomson, E	Induction-coils	July 31, 1888
389,265	Thomson, E	Regulators	Sept. 11, 1888
389,779	Thomson, E	Magneto-electric	Sept. 18, 1888
390,318	Thomson, E	do	Oct. 2, 1888
391,437	Thomson, E	Systems of distribution	Oct. 23, 1888
392,765	Thomson, E	Magneto-electric	Nov. 13, 1888
393,040	Thomson, E	Bridges, girders and columns	Nov. 20, 1888
394,892	Thomson, E	Heaters	Dec. 18, 1888
395,018	Thomson, E	Meters	Dec. 25, 1888
396,009	Thomson, E	Heaters	Jan. 8, 1889
396,010	Thomson, E	do	Jan. 8, 1889
396,011	Thomson, E	do	Jan. 8, 1889
396,012	Thomson, E	do	Jan. 8, 1889
396,013	Thomson, E	do	Jan. 8, 1889
396,014	Thomson, E	do	Jan. 8, 1889
396,015	Thomson, E	do	Jan. 8, 1889
396,039	Thomson, E	do	Jan. 8, 1889
397,616	Thomson, E	Regulators	Feb. 12, 1889
398,912	Thomson, E	Heaters	Mar. 5, 1889
398,913	Thomson, E	Magneto-electric	Mar. 5, 1889
398,914	Thomson, E	Heaters	Mar. 5, 1889
399,800	Thomson, E	Magneto-electric	Mar. 19, 1889
400,515	Thomson, E	Systems of distribution	Apr. 2, 1889
400,516	Thomson, E	do	Apr. 2, 1889

No.	NAME.	CLASS.	DATE.
400,971	Thomson, E.	Motors	Apr. 9, 1889
400,972	Thomson, E.	Induction-coils	Apr. 9, 1889
400,973	Thomson, E.	Magneto-electric	Apr. 9, 1889
401,085	Thomson, E.	Lightning arresters	Apr. 9, 1889
401,608	Thomson, E.	Systems of distribution	Apr. 16, 1889
401,803	Thomson, E.	Meters	Apr. 23, 1889
403,157	Thomson, E.	Heaters	May 14, 1889
403,707	Thomson, E.	do	May 21, 1889
403,708	Thomson, E.	do	May 21, 1889
406,010	Thomson, E.	Meters	June 25, 1889
399,801	Thomson, E. and Wightman, M. J.	Motors	Mar. 19, 1889
405,284	Thone, F.	Magneto-electric	June 18, 1889
394,520	Thornycroft, J. I.	Indicators	Dec. 11, 1888
398,194	Timmis, I. A.	Batteries, secondary	Feb. 19, 1889
389,423	Tirrell, J. P.	Bells	Sept. 11, 1888
397,880	Toulmin, M.	Railway gates, electric	Feb. 12, 1889
386,729	Townsend, L. and Auten, J. E.	Telegraphy, keys	July 24, 1888
392,766	Trafford, W.	Annunciators	Nov. 13, 1888
401,229	Trapp, E. A.	Telescopes	Apr. 9, 1889
394,797	Tregoning, J.	Magneto-electric	Dec. 18, 1888
385,390	Trippe, S. L.	Batteries, secondary	July 3, 1888
388,601	Trippe, S. L.	do	Aug. 28, 1888
389,676	Trippe, S. L.	Batteries, galvanic	Sept. 18, 1888
395,761	Trott, S.	Locomotion	Jan. 8, 1889
393,405	Turner, D. B.	Lights, arc, gravity feed, clutch	Nov. 27, 1888
400,808	Turner, J. A.	Cut-outs, mechanical	Apr. 2, 1889
389,678	Turner, T. G.	Telegraphy, fire	Sept. 18, 1888
389,122	Turner, W. A.	Railway signals	Sept. 4, 1888
400,520	Tuttle, C. R.	Telephones, supports	Apr. 2, 1889
390,101	Tweedale, E.	Applications, general	Sept. 25, 1888
385,974	Vail, T. N.	Telephones, systems	July 10, 1888
385,975	Vail, T. N.	do	July 10, 1888
385,976	Vail, T. N.	do	July 10, 1888
385,977	Vail, T. N.	do	July 10, 1888
385,978	Vail, T. N.	do	July 10, 1888
394,230	Vail, T. N. and Seely, J. A.	do	Dec. 11, 1888
397,479	Vandegrift, J. A.	Lights, incandescent	Feb. 5, 1889
390,921	Van Depoele, C. J.	Motors	Oct. 9, 1888
393,275	Van Depoele, C. J.	Locomotion	Nov. 20, 1888
393,276	Van Depoele, C. J.	do	Nov. 20, 1888
393,277	Van Depoele, C. J.	do	Nov. 20, 1888
393,278	Van Depoele, C. J.	do	Nov. 20, 1888
393,317	Van Depoele, C. J.	do	Nov. 20, 1888
394,035	Van Depoele, C. J.	Regulators	Dec. 4, 1888
394,036	Van Depoele, C. J.	Motors	Dec. 4, 1888
394,037	Van Depoele, C. J.	Locomotion	Dec. 4, 1888
394,038	Van Depoele, C. J.	do	Dec. 4, 1888
394,039	Van Depoele, C. J.	do	Dec. 4, 1888
394,417	Van Depoele, C. J.	Motors	Dec. 11, 1888
394,525	Van Depoele, C. J.	do	Dec. 11, 1888
396,310	Van Depoele, C. J.	Locomotion	Jan. 15, 1889
396,311	Van Depoele, C. J.	do	Jan. 15, 1889
396,312	Van Depoele, C. J.	do	Jan. 15, 1889
396,313	Van Depoele, C. J.	do	Jan. 15, 1889
396,314	Van Depoele, C. J.	Motors	Jan. 15, 1889
397,451	Van Depoele, C. J.	Locomotion	Feb. 5, 1889
398,294	Van Depoele, C. J.	Railways, underground	Feb. 19, 1889
399,882	Van Depoele, C. J.	Locomotion	Mar. 19, 1889
400,274	Van Depoele, C. J.	Gearing	Mar. 26, 1889
400,375	Van Depoele, C. J.	Locomotion	Mar. 26, 1889
400,809	Van Depoele, C. J.	Motors	Apr. 2, 1889
401,230	Van Depoele, C. J.	Regulators	Apr. 9, 1889
401,231	Van Depoele, C. J.	Motors	Apr. 9, 1889
402,117	Van Depoele, C. J.	Locomotion	Apr. 23, 1889
403,009	Van Depoele, C. J.	do	May 7, 1889
403,010	Van Depoele, C. J.	Connectors	May 7, 1889
403,011	Van Depoele, C. J.	Locomotion	May 7, 1889
403,800	Van Depoele, C. J.	do	May 21, 1889
403,801	Van Depoele, C. J.	do	May 21, 1889
404,324	Van Depoele, C. J.	Regulators	May 28, 1889
404,325	Van Depoele, C. J.	Locomotion	May 28, 1889
405,626	Van Depoele, C. J.	do	June 18, 1889
405,627	Van Depoele, C. J.	do	June 18, 1889
405,628	Van Depoele, C. J.	do	June 25, 1889
405,750	Van Depoele, C. J.	do	June 25, 1889
402,367	Van Dorn, W. L.	Medical and surgical, body-wear	Apr. 30, 1889
403,626	Van Epps, F. L.	Telegraphy, relays and sounders	May 21, 1889

No.	NAME.	CLASS.	DATE.
388,512	Van Gestel, J. T	Motors	Aug. 28, 1888
388,513	Van Gestel, J. T	Magneto-electric	Aug. 28, 1888
388,514	Van Gestel, J. T	Locomotion	Aug. 28, 1888
388,746	Van Gestel, J. T	Batteries, secondary	Aug. 28, 1888
405,751	Van Gestel, J. T	do	June 25, 1889
388,091	Van Rysselberghe, F	Telegraphy, reed	Aug. 21, 1888
388,092	Van Rysselberghe, F	do	Aug. 21, 1888
400,523	Van Rysselberghe, F	do	Apr. 2, 1889
387,463	Vansant, J. A. and Anderson, F. S	Rheostats	Aug. 7, 1888
387,464	Vansant, J. A. and Anderson, F. S	do	Aug. 7, 1888
393,529	Vansize, W. B	Telephones, systems	Nov. 27, 1888
10,989	Vansize, W. B (Reis. of 393,529.)	do	Mar. 5, 1889
386,512	Verstraete, E	Street cars	July 24, 1888
403,802	Vetter, J. C	Batteries, galvanic	May 21, 1889
389,123	Vigil, I. and Revueltas, J. N	Bathometers	Sept. 4, 1888
395,019	Von Hefner-Alteneck, F. and Hoffmann, C	Magneto-electric	Dec. 25, 1888
386,281	Waddell, M	Blasting and fuses	July 17, 1888
388,093	Waddell, M	Magneto-electric	Aug. 21, 1888
400,525	Waddell, W. H	Railway signals	Apr. 2, 1889
393,132	Wagner, F. C	Meters	Nov. 20, 1888
399,224	Wagner, F. C	Regulators	Mar. 5, 1889
396,786	Wagner, G. G	Registers	Jan. 29, 1889
385,686	Wailes, J. S	Clothes lines	July 3, 1888
395,932	Waite, H. E	Induction-coils	Jan. 8, 1889
405,334	Waite, H. E	Friction generators	June 18, 1889
386,225	Walker, G. W	Batteries, secondary, applications	July 17, 1888
392,836	Wallace, J. B	Batteries, galvanic	Nov. 13, 1888
401,394	Walsh, E., jr	Furnaces, accessories	Apr. 16, 1889
401,521	Walsh, E., jr	Alarms	Apr. 16, 1889
392,244	Walter, H	Batteries, secondary	Nov. 6, 1888
403,158	Walter, H. E	Regulators	May 14, 1889
397,320	Ward, J. G	Electro-deposition	Feb. 5, 1889
405,515	Warde, G. H	Conductors, underground	June 18, 1889
387,703	Warner, C. D	Clocks, electric	Aug. 14, 1888
387,704	Warner, C. D	do	Aug. 14, 1888
399,934	Warrell, N	Medical and surgical, body-wear	Mar. 19, 1889
291,285	Warth, A	Apparel, cutting	Oct. 16, 1888
387,194	Waterhouse, A. G	Regulators	July 31, 1888
387,195	Waterhouse, A. G	do	July 31, 1888
389,029	Waterhouse, A. G	do	Sept. 4, 1888
389,030	Waterhouse, A. G	do	Sept. 4, 1888
393,038	Waterhouse, A. G	Galvanometers	Nov. 20, 1888
391,568	Waters, B. E	Indicators	Oct. 23, 1888
396,632	Waters, B. E	Cut-outs, mechanical	Jan. 22, 1889
395,096	Watson, A	Alarms	Dec. 25, 1888
400,978	Watts, H. F	Heaters	Apr. 9, 1889
389,781	Webster, W	Sewage and night-soil	Sept. 18, 1888
387,467	Webster, W., jr	Purifying water	Aug. 7, 1888
397,407	Webster, W., jr	Electrolysis	Feb. 5, 1889
393,101	Webster, W., jr	do	Feb. 19, 1889
387,382	Weems, D. G	Locomotion	Aug. 7, 1888
387,383	Weems, D. G	do	Aug. 7, 1888
391,394	Weems, D. G	do	Oct. 16, 1888
393,280	Weems, D. G	do	Nov. 20, 1888
396,633	Weems, D. G	do	Jan. 22, 1889
398,209	Weis, F. J	Street cars, steam	Feb. 19, 1889
387,610	Weis, J	Locomotives	Aug. 7, 1888
385,393	Weisser, T	Gas burners, incandescent	July 3, 1888
398,560	Weller, F. A. and Rietzel, A. F	Cut-outs, mechanical	Feb. 26, 1889
398,561	Weller, F. A. and Rietzel, A. F	do	Feb. 26, 1889
397,260	Wellens, R	Valve controllers	Feb. 5, 1889
396,124	Wells, C. H	Locomotion	Jan. 15, 1889
390,930	Westinghouse, G., jr	Regulators	Oct. 9, 1888
393,596	Westinghouse, G., jr	Valves, steam-actuated	Nov. 27, 1888
399,639	Westinghouse, G., jr	Systems of distribution	Mar. 12, 1889
404,139	Westinghouse, G., jr	Locomotion	May 28, 1889
10,944	Weston, E (Reis. of 381,304.)	Rheostats	July 17, 1888
10,945	Weston, E (Reis. of 381,305.)	do	July 17, 1888
389,124	Weston, E	Batteries, thermal	Sept. 4, 1888
389,125	Weston, E	do	Sept. 4, 1888
389,272	Weston, E	Alarms, burglar	Sept. 11, 1888
389,273	Weston, E	Recorders	Sept. 11, 1888
389,274	Weston, E	Galvanometers	Sept. 11, 1888
392,335	Weston, E	do	Nov. 6, 1888
392,336	Weston, E	do	Nov. 6, 1888
392,337	Weston, E	do	Nov. 6, 1888
392,476	Weston, E	do	Nov. 6, 1888

No.	NAME.	CLASS.	DATE.
392,477	Weston, E	Galvanometers	Nov. 6, 1888
392,478	Weston, E	do	Nov. 6, 1888
400,378	Weston, E	Lights, incandescent	Mar. 26, 1889
400,980	Weston, E	Galvanometers	Apr. 9, 1889
401,317	Weston, E	Magneto-electric	Apr. 9, 1889
401,318	Weston, E	do	Apr. 9, 1889
401,668	Weston, E	do	Apr. 16, 1889
401,669	Weston, E	do	Apr. 16, 1889
403,311	Weston, E	Galvanometers	May 14, 1889
403,312	Weston, E	do	May 14, 1889
401,616	Wheeler, F	Locomotion	Apr. 16, 1889
385,782	Wheeler, S. S	Cut-outs, mechanical	July 10, 1888
403,017	Wheeler, S. S	Regulators	May 7, 1889
403,018	Wheeler, S. S	Magneto-electric	May 7, 1889
386,569	Wheelock, B. J. and J. W	Batteries, galvanic	July 24, 1888
393,346	Whelan, J	Conductors, underground	Nov. 20, 1888
401,617	White, A. C	Galvanometers	Apr. 16, 1889
405,815	White, J. C	Railway signals	June 25, 1889
401,527	Whitney, E. R	Cut-outs, thermal	Apr. 16, 1889
399,716	Whittier, C	Applications, tools and machines	Mar. 19, 1889
396,791	Whittingham, G. H	Motors	Jan. 29, 1889
404,813	Widdicombe, R. H	Connectors	June 4, 1889
394,627	Widdifield, W. P. and Bowman, A. H	Car brakes	Dec. 18, 1888
394,897	Wiegand, H. H	Batteries, secondary	Dec. 18, 1888
387,276	Wieseman, A. G	Clocks, electric	Aug. 7, 1888
389,729	Wiest, J	Heaters	Sept. 18, 1888
403,164	Wiest, J	Capstan and windlass	May 14, 1889
386,099	Wightman, M. J. and Lemp, H	Cut-outs, thermal	July 10, 1888
395,936	Wightman, M. J	Lighting, systems	Jan. 8, 1889
393,282	Wildt, E. A	Magnetic locks and bolts	Nov. 20, 1888
389,037	Wilkinson, E	Applications, tools and machines	Sept. 4, 1888
390,329	Willatowsky, A. F. L	Telegraphy, circuit-closers	Oct. 2, 1888
396,792	Williams, J. T	Locomotion	Jan. 29, 1889
405,194	Williams, J. T	do	June 11, 1889
10,949	Williams, P. G. and Roovers, A. W. (Reis. of 372,441).	Applications, general	July 24, 1888
386,860	Williams, P. G. and Roovers, A. W	do	July 31, 1888
399,591	Williams, P. G. and Roovers, A. W	do	Mar. 12, 1889
400,985	Willis, J. B	Annunciators	Apr. 9, 1889
403,630	Willson, T. L	Magneto-electric	May 21, 1889
406,015	Willson, T. L	do	June 25, 1889
399,305	Wilson, C. H	Cut-outs, thermal	Mar. 12, 1889
397,678	Wilson, F	Theatrical appliances	Feb. 12, 1889
386,175	Wilson, J. C	Telegraphy, fire	July 17, 1888
392,248	Wilson, J. C	Telephones, systems	Nov. 6, 1888
392,838	Wilson, J. C	Recorders	Nov. 13, 1888
395,101	Wilson, J. C	Telegraphy, fire	Dec. 25, 1888
395,102	Wilson, J. C	do	Dec. 25, 1888
402,120	Wilson, J. C	Recorders	Apr. 23, 1889
402,639	Wilson, J. C	Relays and sounders	May 7, 1889
405,235	Wilson, J. C	Telegraphy, fire	June 11, 1889
395,862	Winslow, G. E	Indicators	Jan. 8, 1889
389,626	Wirsching, A	Time checks	Sept. 18, 1888
391,446	Wiseman, A. G	Clocks, electric	Oct. 23, 1888
404,457	Wisner, A. J	Railway signals	June 4, 1889
402,121	Woelk, E. A	Telephones, switches	Apr. 23, 1889
393,733	Wollin, W. F. and Werline, E. H	Lights, sockets and keys	Nov. 27, 1888
401,095	Wood, F. E	Lightning rods	Apr. 9, 1889
386,732	Wood, F. W. and Fowler, J	Railways, traction, underground	July 24, 1888
394,946	Wood, J. B	Telephones, calls	Dec. 18, 1888
385,493	Wood, J. J	Drop-lights and hangers	July 3, 1888
398,870	Wood, J. J	Lights, arc, special features	Mar. 5, 1889
385,894	Wood, M. M	Annunciators	July 10, 1888
397,953	Wood, M. M	Drop-lights and hangers	Feb. 19, 1889
404,667	Woodhouse, D. A. and Forster, T. V	Applications, tools and machines	June 4, 1889
400,028	Woodring, W. H. and Gilbert, C. S	Alarms	Mar. 19, 1889
386,282	Woods, G. T	Locomotion	July 17, 1888
387,839	Woods, G. T	Batteries, galvanic	Aug. 14, 1888
388,803	Woods, G. T	Telegraphy, railway car	Aug. 28, 1888
395,533	Woods, G. T	Cut-outs, electro-magnetic	Jan. 1, 1889
393,954	Woodward, H	Batteries, secondary	Dec. 4, 1888
393,955	Woodward, H	do	Dec. 4, 1888
394,090	Woodward, H	Batteries, thermal	Dec. 4, 1888
390,544	Woodward, J. H	Electrodes	Oct. 2, 1888
385,494	Wright, C. D	Cut-outs, electro-magnetic	July 3, 1888
386,049	Wright, G. H	Railway signals	July 10, 1888
390,423	Wright, P	Relays and repeaters	Oct. 2, 1888

No.	NAME.	CLASS.	DATE.
391,447	Wright, P.-----	Locomotion-----	Oct. 23, 1888
394,670	Wright, R. D.-----	Batteries, galvanic-----	Dec. 18, 1888
398,566	Wright, W. H. S.-----	Cut-outs, thermal-----	Feb. 26, 1889
405,519	Wuerpel, M.-----	Railway signals-----	June 18, 1889
392,577	Wurts, A.-----	Meters-----	Nov. 6, 1888
401,322	Wynne, F.-----	Locomotion-----	Apr. 9, 1889
405,452	Yale, C. O.-----	Electro-deposition-----	June 18, 1889
387,672	Yarwood, M. C.-----	Knitting and netting, stopping-----	Aug. 14, 1888
402,290	Yeiser, F.-----	Motors-----	Apr. 30, 1889
396,795	Young, J.-----	Annunciators-----	Jan. 29, 1889
402,642	Young, J.-----	Telegraphy, fire-----	May 7, 1889
392,393	Young, J. C.-----	Lights, arc, gravity feed, clutch-----	Nov. 6, 1888
405,646	Zalinski, E. L. and Smith, H. J.-----	Blasting and fuses-----	June 18, 1889
405,647	Zalinski, E. L. and Smith, H. J.-----	do-----	June 18, 1889
392,090	Zipernowsky, C., Déri, M. and Bláthy, O. T.-----	Systems of distribution-----	Oct. 30, 1888
389,184	Zech, O.-----	Magneto-electric-----	Sept. 4, 1888
396,450	Zoeller, T. J.-----	Telegraphy, fire-----	Jan. 22, 1889

3 9088 00044 9173
SMITHSONIAN INSTITUTION LIBRARIES